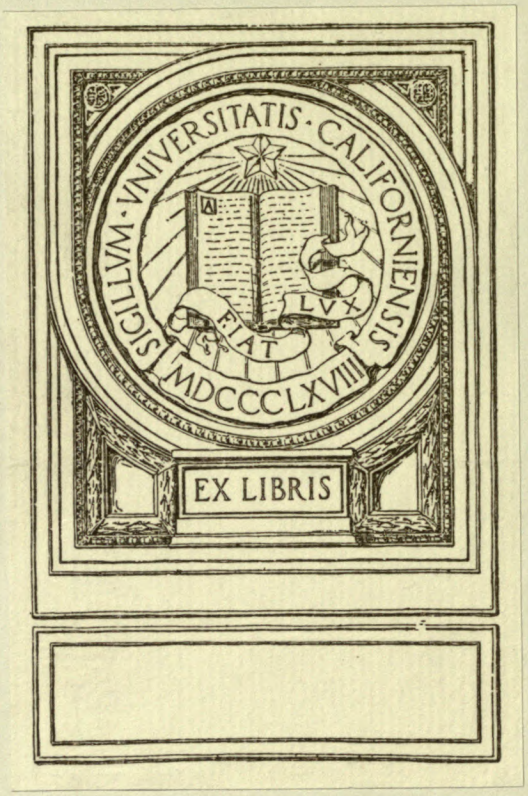
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# PUBLICATIONS OF THE YERKES OBSERVATORY

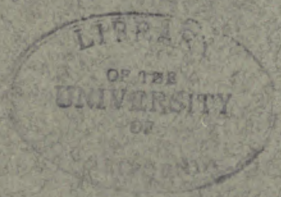
VOL. III PART III

## THE ROTATION PERIOD OF THE SUN

as Determined from Measures of Plates
Taken with the Rumford Spectroheliograph

BY

PHILIP FOX



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# INTRODUCTORY NOTE

By Edwin B. Frost, Director

The issue of this memoir as Part III of Volume III involves a change from the original plan in respect to this volume, for it had been intended that Part III should be the extensive memoir on his micrometric measurements of stars in the globular clusters by Professor Edward E. Barnard. Part I (pages 1–26), "The Rumford Spectroheliograph of the Yerkes Observatory," by George E. Hale and Ferdinand Ellerman, was printed in 1903. Part II (pages 29–66), "The Spectrum of the High Potential Discharge between Metallic Electrodes in Liquids and in Gases at High Pressures," by George E. Hale and Norton A. Kent, was printed in 1907. The sheets of these parts were not bound up, at the time, as it was intended to issue them in the completed volume; they were distributed as separate parts only recently. Because of the necessity of extending for a longer term of years the measures of the clusters by Professor Barnard, that work, when completed, will appear in some future volume.

The present paper by Professor Fox, of Northwestern University, Director of the Dearborn Observatory, is based upon observations made by him with the Rumford spectroheliograph during the period while he was a member of the staff of the Yerkes Observatory, 1903–1905 and 1906–1909. Many of the measurements on the globe measuring machine were made by Mr. Fox on occasional visits to this observatory in 1912 and in 1913. The results of the work in nearly final form were communicated to the American Astronomical Society by him at the meeting in the summer of 1914. The military service of Major Fox then deferred for several years the final revision of the manuscript.

The fourth and concluding part of the present volume will be the paper on "The Forms and Motions of the Solar Prominences" by Edison Pettit (Thesis for the degree of Doctor of Philosophy in the University of Chicago, August, 1920). It is hoped that this can be issued before the end of 1921.

Yerkes Observatory
July 1921

# ROTATION OF THE SUN

By Philip Fox

## INTRODUCTION

A selected number of plates from the series of spectroheliograms made at the Kenwood Observatory in 1892–94 were measured in 1903–4 and gave the first results on the rotation period of the Sun from the motion of calcium flocculi in heliographic longitude.[1] Before the results were published the Rumford spectroheliograph at the Yerkes Observatory had been put into successful operation and also the spectroheliograph of the Mount Wilson Observatory. It was therefore possible to write:[2] "We are both engaged in work with powerful instruments, which furnish larger solar photographs, much richer in detail and better suited for measurement than the Kenwood plates. We accordingly expect to return to this discussion with the advantage afforded by a longer series of better observations." The present paper, long delayed in publication, is the fulfilment of this expectation so far as the series of plates with the Rumford spectroheliograph is concerned. That this work was in progress has been evidenced by various references to it and by some preliminary reports.[3]

## RUMFORD SPECTROHELIOGRAPH

The Rumford Spectroheliograph has been fully described by Hale and Ellerman in Vol. III, Part I, of these publications. In that place and in numerous subsequent papers by Fox, Abetti, Slocum, Lee, and Pettit, the character of the plates made with the instrument has been illustrated. For the purpose of measurement, the large solar image (diameter = 178 mm), with consequent finer definition, offers obvious advantages over the smaller image (diameter = 51 mm) of the Kenwood plates used in the earlier investigation. Moreover, the distortion of the image found in the Kenwood spectroheliograms, due to the curvature of spectrum lines, was very cleverly avoided in the Rumford spectroheliograms.[4] If the instrument is in perfect adjustment and properly mounted on the telescope, the images are circular and free from distortion.

In the long series of adjustments[5] necessary in this complex instrument some, unfortunately, were not sufficiently discriminative and some were difficult of maintenance or not scrupulously observed, so that many of the early plates and, for certain periods, some of the later ones do not have circular images.

The whole series from 1903 to 1908, inclusive, was very carefully examined for suitability for measurement. The best plate of each day of a succession of two or more clear days was chosen. In all, 285 plates have been measured. They were made by the following observers:

| | | | |
|---|---|---|---|
| Fox | 188 | Fox and S. A. Mitchell | 1 |
| Fox and Abetti | 57 | Ellerman | 13 |
| Fox and Slocum | 19 | Slocum | 2 |
| Fox and Brown | 4 | Abetti | 1 |

Prints were made from the negatives and these were carefully compared. Features in the flocculi which persisted from day to day were marked on the prints for measurement. The character of these

[1] Hale and Fox, *The Rotation of the Sun*. Carnegie Institution of Washington, Publication No. 93, 1908.

[2] *Ibid.*, p. 53.

[3] *Transactions of the International Union for Solar Research*, Vol. II (1908), pp. 192, 194, and Vol. III (1911), p. 97. *Science*, N.S., Vol. XXV (1907), p. 613. *Publications of the American Astronomical Society*, Vol. III (1918), p. 80.

[4] *Publications of the Yerkes Observatory*, Vol. III (1903), p. 7.

[5] *Ibid.*, Vol. III (1903), p. 12.

points is shown on the marked print of Plate XXIV. Their persistency may be seen by careful comparison of the photographs in Plate XXV. Some of the flocculi changed form very rapidly, so that the points in many cases could not be followed with certainty for more than a day even though plates were available for a longer period.

## METHOD OF MEASUREMENT AND COMPUTATION

The globe measuring machine used for the Kenwood spectroheliograms was employed. It was, however, altered in certain important respects in the midst of the series. This instrument, as originally used, was described in the earlier paper, but inasmuch as that paper is not generally accessible the essentials of the description are repeated here.

The photographs were projected by means of the light from an electric arc lamp upon a globe accurately ruled with a series of meridians and parallels, Plate XXVI. The parts of the apparatus in its first form were: (*a*) an arc lamp, self-feeding, so as to keep the arc at a fixed point; (*b*) a condensing lens, 10 inches

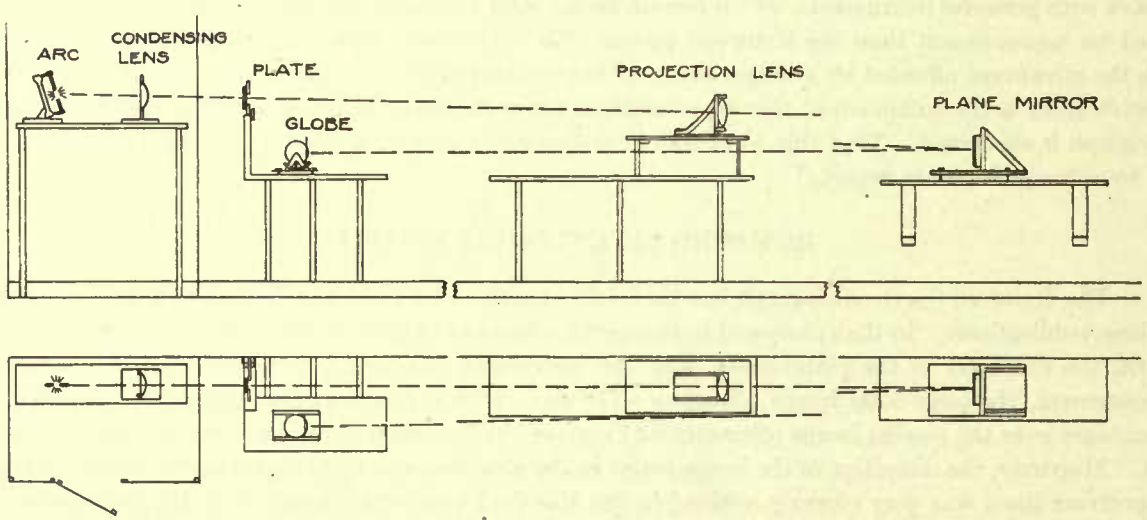



FIG. 1.—Arrangement of the measuring apparatus in its original form: elevation and plan

(25.4 cm) in diameter; (*c*) a frame to carry the solar plate, Figure 2; (*d*) a projection lens,—the lens used was a 12-inch (30.5 cm) objective of 18 feet (5.49 m) focal length, so placed that it formed the image of the photograph on the globe; (*e*) a plane mirror inserted in the path of the rays to secure the necessary distance of the globe from the lens in the limited space available; (*f*) a globe of diameter 9.53 inches (24.21 cm), on which was accurately ruled a set of meridians and parallels of latitude. The arrangement of the apparatus in the original form is shown in Figure 1.

In principle the process of projecting a photograph on this globe amounts to throwing it upon an artificial sun provided with a visible net of meridians and parallels for the measurement of heliographic longitudes and latitudes. The primary requirements are: (*a*) that the globe should be at such distance, 26.0 m, from the projection lens that it would subtend an angle equal to the solar diameter; (*b*) that the equation, $\frac{1}{a}+\frac{1}{b}=\frac{1}{f}$, should be fulfilled, where $a$, $b$, and $f$ are respectively the distance of the plate from the lens, the distance of the globe from the lens, and the focal-length of the lens; (*c*) that the size of the solar image on the plate should be to the size of the globe as $a$ to $b$. To fulfil these relations lantern slides were made from the original plates to give a solar diameter of 2.55 inches (6.48 cm).

The first 121 plates of this series were measured under these conditions. Thereafter a concave mirror, made by Mr. O. L. Petitdidier, was substituted for the lens and plane mirror. Its aperture was

8.5 inches (21.6 cm) and the focal-length such that the plate and globe could be in the conjugate foci and at the same time permit the use of the original negatives which have solar images of 7.0 inches (17.78 cm) diameter. The focal-length was 36.1 feet (11.0 m). In this form the instrument was used as a Herschellian reflector, Figure 3. Needless to say, the plate and the globe were put as near the optical axis as was possible without interference. This form of the instrument was simpler and more satisfactory in use.

The orientation for position angle of the sun's axis was accomplished by rotating the plates on the frame (*c*) about the axis of projection, and for heliographic latitude of the center of the disk by rotating the globe about a horizontal axis perpendicular to the axis of projection. The image was centered concentrically on the globe in the first form of the apparatus by moving the frame (*c*) which held the plate

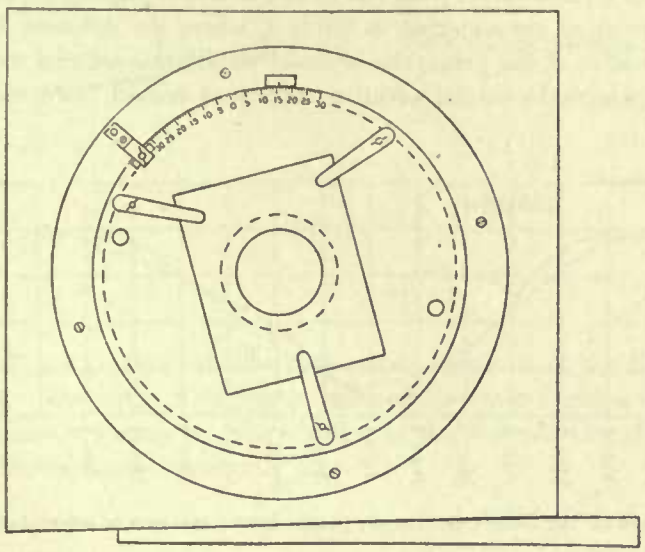


FIG. 2.—Plate-holder of the globe measuring machine

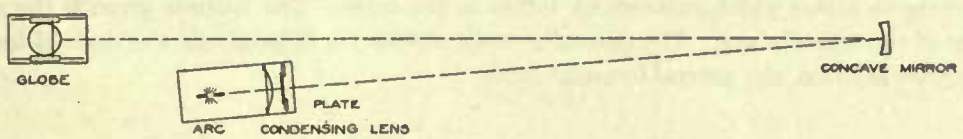



FIG. 3.—Arrangement of the measuring apparatus in its modified form

right and left and by means of a double wedge up and down. The frame was beside the globe and the adjustment could be made without moving from the globe. In the second form the centering was accomplished by rotating the mirror about two axes, one vertical and one horizontal. Cords were run from the mirror to the globe so that the movements about these axes could be accomplished by the observer without moving from the globe. As it was not planned to measure the positions of flocculi near the limb of the Sun, and as it was difficult to tell when the image was accurately centered on the globe by direct observation, a screen was mounted in front of the center of the globe through which the face of the globe toward the plate projected. (See Plate XXVI.) On this screen a circle was ruled concentric with the periphery of the globe as seen from the plate. When the image was brought to fit this circle it was adjusted both in size and position. The globe could be moved to and from the lens through a limited range so that its angular diameter as seen from the projection lens would correspond to the varying angular diameter of the Sun itself in the sky.

MEASUREMENT

The circles on the globe were at intervals of degrees, and positions of all points were estimated to one-tenth of a degree. Few points were measured which were more than 45° from the central meridian, for any displacement of the image as a whole would be magnified in heliographic position as the limb was approached. With the instrument in careful adjustment and the plate properly oriented, the measurement of positions was accurate to about one-tenth of a degree. The positions of sun-spots were also measured and will be found with a discussion in Addendum II.

The process of measurement was greatly facilitated and accelerated by previously selecting the points to be measured from the prints and listing them in order in the notebook. The time required at the measuring machine for a plate varied from one to two hours, depending on the number of points measured. All measures of position are collected in Table I, where the different columns contain the plate number and date, the number of the point, the latitude, the diurnal sidereal motion, the diurnal synodic motion, and the longitudes from the central meridian on the first, second, third, etc., days. All observations

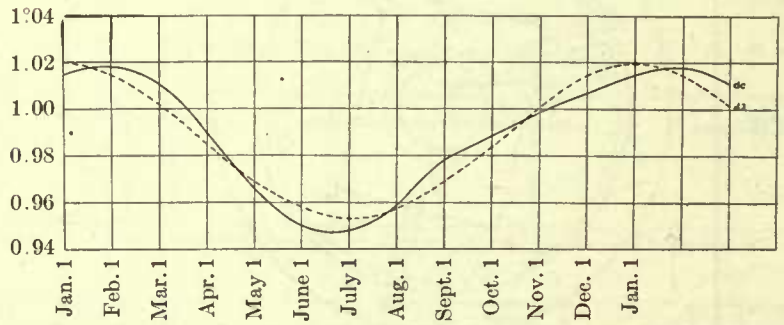



FIG. 4.—Curves for the transformation of synodic diurnal motions to sidereal diurnal motions

of any point are found under the date of first appearance. The longitudes in Table I for the second, third, etc., day belong to plates which successively follow in the table. The latitude given is the mean of the observations of the several days. The diurnal synodic motion ($x$) in longitude was derived for each point by a least-square solution, the general formula[6] being

$$x = 1440\,\frac{K[t\gamma]-[t]\,[\gamma]}{K[t^2]-[t]^2},$$

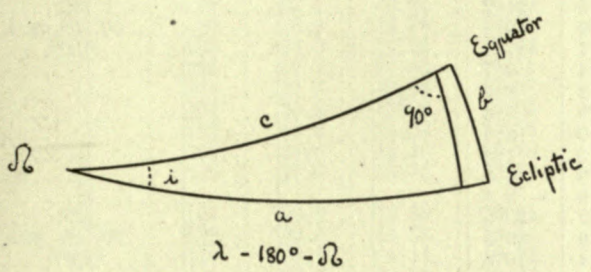
where $t$ is the time in minutes from the date of the first plate to that of the subsequent individual plates, $\gamma$ is the difference in longitude of the individual plates taken from the first plate, and $K$ is the number of observations.

The individual longitudes are given with reference to the central solar meridian as seen from the Earth. This is not a fixed reference circle but is moving due to the orbital motion of the Earth, and the diurnal motions derived from the measures of course are the synodic diurnal motions. The motion of the Earth is found in the American *Ephemeris* as a change in the longitude of the Sun. It is not constant; but, for any given flocculus measured on from two to six days, we can safely assume that it is constant since the treatment of the measures is purely differential. The daily value of the Earth's motion we will call $\delta\lambda$. As the Sun's axis is inclined 7°15′ to the ecliptic we have a varying component of the $\delta\lambda$ affecting the motion

[6] *Rotation Period of the Sun*, Publication Carnegie Institution, No. 93 (1908), p. 13.

of the central meridian. The value of $\delta\lambda$ has been platted for the different days of the year as a broken line in Figure 4. To evaluate the projection of this on the solar equator the following solution is given:

$$\begin{aligned} \cos a &= \cos b \cos c \\ \sin a \cos i &= \cos b \sin c \\ \tan a \cos i &= \tan c \end{aligned} \qquad (1)$$




Differentiating:

$$\cos i \sec^2 a \, \delta a = \sec^2 c \, \delta c \qquad (2)$$

from which, putting $\delta a = \delta\lambda$

$$\frac{\tan c}{\tan a} = \frac{\cos^2 a \, \delta c}{\cos^2 c \, \delta\lambda}$$

whence,

$$\delta c = \frac{\sin 2c}{\sin 2a} \delta\lambda \qquad (3)$$

In these equations $i = 7°15'$, $a = \lambda - 180° - \Omega$ = the heliocentric longitude of the Earth from the ascending node of the Sun's equator. The value of $\delta c$ was determined for various dates through the year and is platted as the continuous line in Figure 4. The addition of the diurnal value of $\delta c$ to the diurnal synodic motion gives at once the diurnal sidereal motion.

TABLE I

OBSERVATIONS AND DIURNAL MOTIONS

| PLATE NUMBER AND DATE | NUMBER | LATITUDE | DIURNAL MOTION | | LONGITUDES ON DAYS OF OBSERVATION | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sidereal | Synodic | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 449 | 37 | −17°5 | 14°48 | 13°52 | 27°5 | 38°1 | ..... | ..... | ..... | ..... | ..... |
| Aug. 6, '03 | 38 | −23.0 | 14.99 | 14.03 | 22.9 | 33.9 | ..... | ..... | ..... | ..... | ..... |
| $1^h50^m$ | 39 | −18.0 | 14.86 | 13.90 | 15.0 | 25.9 | ..... | ..... | ..... | ..... | ..... |
| C.S.T.* | 40 | 12.8 | 15.24 | 14.28 | 10.0 | 21.2 | ..... | ..... | ..... | ..... | ..... |
| | 41 | 13.2 | 15.24 | 14.28 | 7.9 | 19.1 | ..... | ..... | ..... | ..... | ..... |
| | 42 | 15.5 | 14.73 | 13.77 | 6.7 | 17.5 | ..... | ..... | ..... | ..... | ..... |
| | 43 | 15.4 | 13.84 | 12.88 | − 0.4 | 9.7 | ..... | ..... | ..... | ..... | ..... |
| | 44 | 19.2 | 14.22 | 13.26 | − 2.2 | 8.2 | ..... | ..... | ..... | ..... | ..... |
| | 45 | 23.5 | 14.35 | 13.39 | − 4.9 | 5.6 | ..... | ..... | ..... | ..... | ..... |
| | 46 | 27.3 | 13.84 | 12.88 | − 2.0 | 8.1 | ..... | ..... | ..... | ..... | ..... |
| | 47 | 20.0 | 14.73 | 13.77 | − 9.3 | 1.5 | ..... | ..... | ..... | ..... | ..... |
| | 48 | 15.9 | 14.22 | 13.26 | − 9.9 | 0.5 | ..... | ..... | ..... | ..... | ..... |
| | 49 | 22.3 | 14.22 | 13.26 | −13.9 | − 3.5 | ..... | ..... | ..... | ..... | ..... |
| | 50 | −23.8 | 14.73 | 13.77 | −41.7 | −30.9 | ..... | ..... | ..... | ..... | ..... |
| | 51 | −25.0 | 14.48 | 13.52 | −40.9 | −30.3 | ..... | ..... | ..... | ..... | ..... |
| | 52 | −21.9 | 13.20 | 12.24 | −39.4 | −29.8 | ..... | ..... | ..... | ..... | ..... |
| | 53 | 19.9 | 14.22 | 13.26 | −12.4 | − 2.0 | ..... | ..... | ..... | ..... | ..... |
| | 54 | 26.0 | 14.73 | 13.77 | − 7.8 | 3.0 | ..... | ..... | ..... | ..... | ..... |
| | 55 | 27.5 | 14.99 | 14.03 | −10.4 | 0.6 | ..... | ..... | ..... | ..... | ..... |
| | 56 | 18.5 | 15.24 | 14.28 | 20.0 | 31.2 | ..... | ..... | ..... | ..... | ..... |
| 452 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Aug. 7, '03 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| $8^h39^m$ | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 480 | 57 | −22.2 | 14.89 | 13.92 | 23.5 | 34.5 | ..... | ..... | ..... | ..... | ..... |
| Aug. 17, '03 | 58 | 14.9 | 15.14 | 14.17 | 28.8 | 40.0 | ..... | ..... | ..... | ..... | ..... |
| $3^h10^m$ | 59 | 17.6 | 14.89 | 13.92 | 32.0 | 43.0 | ..... | ..... | ..... | ..... | ..... |
| | 60 | 18.6 | 14.89 | 13.92 | 34.1 | 45.1 | ..... | ..... | ..... | ..... | ..... |
| | 61 | 19.3 | 14.76 | 13.79 | 28.2 | 39.1 | ..... | ..... | ..... | ..... | ..... |
| | 62 | 21.9 | 13.88 | 12.91 | 28.0 | 38.2 | ..... | ..... | ..... | ..... | ..... |
| | 63 | 24.0 | 13.37 | 12.40 | 28.9 | 38.7 | ..... | ..... | ..... | ..... | ..... |
| | 64 | 25.2 | 13.88 | 12.91 | 31.8 | 42.0 | ..... | ..... | ..... | ..... | ..... |
| | 65 | 23.4 | 14.13 | 13.16 | 26.9 | 37.3 | ..... | ..... | ..... | ..... | ..... |
| | 66 | 20.9 | 14.64 | 13.67 | 20.2 | 31.0 | ..... | ..... | ..... | ..... | ..... |
| | 67 | 26.8 | 13.46 | 12.49 | 21.8 | 31.5 | 47°0 | ..... | ..... | ..... | ..... |
| | 68 | 24.3 | 13.74 | 12.77 | 18.0 | 28.1 | ..... | ..... | ..... | ..... | ..... |
| | 69 | 16.3 | 14.69 | 13.72 | 16.3 | 27.1 | 44.0 | | | | |
| | 70 | 15.9 | 14.26 | 13.29 | 12.7 | 23.2 | ..... | ..... | ..... | ..... | ..... |
| | 71 | −20.2 | 15.14 | 14.17 | 2.9 | 14.1 | ..... | ..... | ..... | ..... | ..... |
| | 72 | −21.3 | 14.58 | 13.61 | − 2.1 | 8.8 | 25.4 | ..... | ..... | ..... | ..... |
| | 73 | −25.1 | 14.62 | 13.65 | − 2.6 | 8.5 | 25.0 | ..... | ..... | ..... | ..... |
| | 74 | 22.2 | 13.74 | 12.77 | − 0.1 | 10.0 | ..... | ..... | ..... | ..... | ..... |
| | 75 | 24.0 | 13.62 | 12.65 | − 0.9 | 9.1 | ..... | ..... | ..... | ..... | ..... |
| | 76 | 32.4 | 13.24 | 12.27 | − 5.8 | 3.9 | ..... | ..... | ..... | ..... | ..... |
| | 77 | 28.5 | 13.48 | 12.51 | − 7.6 | 2.0 | 16.3 | 30°0 | 39°9 | ..... | ..... |
| | 80 | −27.6 | 13.77 | 12.80 | 18.3 | 28.0 | 44.1 | ..... | ..... | ..... | ..... |
| | 81 | −29.9 | 14.38 | 13.41 | 21.2 | 31.8 | ..... | ..... | ..... | ..... | ..... |
| | 82 | −28.9 | 14.00 | 13.03 | 23.9 | 34.2 | ..... | ..... | ..... | ..... | ..... |
| | 83 | −19.9 | 14.89 | 13.92 | 8.8 | 19.8 | ..... | ..... | ..... | ..... | ..... |
| | 84 | −19.9 | 15.02 | 14.05 | 9.8 | 20.9 | ..... | ..... | ..... | ..... | ..... |
| | 85 | −17.2 | 15.02 | 14.05 | − 3.3 | 7.8 | ..... | ..... | ..... | ..... | ..... |
| | 86 | −17.5 | 14.33 | 13.36 | − 7.8 | 2.9 | 19.2 | ..... | ..... | ..... | ..... |
| | 87 | 27.6 | 13.37 | 12.40 | 16.4 | 26.2 | ..... | ..... | ..... | ..... | ..... |
| | 88 | 24.2 | 13.93 | 12.96 | 9.1 | 19.5 | 35.3 | ..... | ..... | ..... | ..... |
| | 89 | 20.5 | 13.89 | 12.92 | 10.5 | 20.1 | 36.5 | ..... | ..... | ..... | ..... |
| | 90 | 24.8 | 13.24 | 12.27 | −36.4 | −26.7 | ..... | ..... | ..... | ..... | ..... |
| 485 | 78 | 19.4 | 14.15 | 13.18 | 24.3 | 40.3 | ..... | ..... | ..... | ..... | ..... |
| Aug. 18, '03 | 79 | −20.0 | 14.40 | 13.43 | 10.6 | 26.9 | ..... | ..... | ..... | ..... | ..... |
| $10^h08^m$ | 91 | 26.9 | 12.50 | 11.53 | −33.0 | −19.0 | ..... | ..... | ..... | ..... | ..... |
| | 92 | 29.1 | 13.50 | 12.53 | −36.9 | −21.9 | − 8.7 | 0.5 | ..... | ..... | ..... |
| | 93 | 28.4 | 13.70 | 12.73 | −39.0 | −23.7 | −10.3 | − 1.0 | ..... | ..... | ..... |
| | 94 | 30.3 | 13.80 | 12.83 | −44.2 | −29.1 | −15.9 | − 5.7 | ..... | ..... | ..... |
| | 95 | 32.3 | 14.16 | 13.19 | −48.6 | −32.4 | −18.9 | − 9.1 | ..... | ..... | ..... |
| | 96 | − 5.6 | 14.19 | 13.22 | −52.7 | −36.0 | −22.9 | −13.0 | ..... | ..... | ..... |

*$8^h$ to $12^h$ are forenoon hours, $12^h$ to $6^h$ are afternoon hours.

TABLE I—*Continued*

| Plate Number and Date | Number | Latitude | Diurnal Motion | | Longitudes on Days of Observation | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sidereal | Synodic | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 485 (*cont.*) | 97 | − 3°.9 | 14°.13 | 13°.16 | −54°.3 | −37°.9 | −24°.5 | −14°.9 | ..... | ..... | ..... |
| | 98 | 12.1 | 14.55 | 13.58 | −22.3 | − 5.8 | 8.2 | ..... | ..... | ..... | ..... |
| | 80 | −17.5 | 14.34 | 13.37 | 10.9 | 27.3 | 40.9 | ..... | ..... | ..... | ..... |
| 494 | 99 | 22.1 | 14.61 | 13.64 | −10.6 | 3.5 | 13.5 | ..... | ..... | ..... | ..... |
| Aug. 19, '03 | 100 | 23.2 | 14.78 | 13.81 | −13.2 | 1.0 | 11.2 | ..... | ..... | ..... | ..... |
| $3^h38^m$ | 101 | 25.0 | 14.21 | 13.24 | −15.6 | − 2.0 | 7.8 | ..... | ..... | ..... | ..... |
| | 102 | 31.7 | 14.48 | 13.51 | −24.8 | −11.2 | − 0.9 | ..... | ..... | ..... | ..... |
| | 103 | 27.3 | 13.94 | 12.97 | −29.3 | −15.7 | − 6.4 | ..... | ..... | ..... | ..... |
| | 104 | 26.2 | 13.92 | 12.95 | −31.0 | −17.8 | − 8.1 | ..... | ..... | ..... | ..... |
| | 105 | 30.8 | 14.53 | 13.56 | 6.7 | 20.3 | 30.7 | ..... | ..... | ..... | ..... |
| | 106 | 34.6 | 14.16 | 13.19 | 13.7 | 27.3 | 37.0 | ..... | ..... | ..... | ..... |
| | 126 | 27.6 | 13.74 | 12.77 | −31.5 | −18.7 | − 8.9 | ..... | ..... | ..... | ..... |
| 502 | 107 | 26.6 | 13.58 | 12.61 | − 3.6 | 5.9 | ..... | ..... | ..... | ..... | ..... |
| Aug. 20, '03 | 109 | 22.6 | 14.38 | 13.41 | −15.8 | − 5.7 | ..... | ..... | ..... | ..... | ..... |
| $4^h00^m$ | 110 | 20.1 | 14.11 | 13.14 | 4.4 | 14.3 | ..... | ..... | ..... | ..... | ..... |
| | 111 | −27.7 | 14.64 | 13.67 | −22.3 | −12.0 | ..... | ..... | ..... | ..... | ..... |
| | 112 | −27.2 | 14.77 | 13.80 | −27.4 | −17.0 | ..... | ..... | ..... | ..... | ..... |
| | 113 | −31.2 | 14.77 | 13.80 | −31.7 | −21.3 | ..... | ..... | ..... | ..... | ..... |
| | 114 | −24.0 | 14.24 | 13.27 | 13.9 | 23.9 | ..... | ..... | ..... | ..... | ..... |
| | 115 | −27.3 | 14.64 | 13.67 | 15.9 | 26.2 | ..... | ..... | ..... | ..... | ..... |
| | 116 | −29.2 | 13.98 | 13.01 | 15.1 | 24.9 | ..... | ..... | ..... | ..... | ..... |
| | 117 | −33.5 | 13.31 | 12.34 | 17.0 | 26.3 | ..... | ..... | ..... | ..... | ..... |
| | 118 | 23.0 | 14.51 | 13.54 | 33.6 | 43.8 | ..... | ..... | ..... | ..... | ..... |
| | 120 | 17.1 | 15.17 | 14.20 | 38.5 | 49.2 | ..... | ..... | ..... | ..... | ..... |
| | 121 | 36.9 | 13.18 | 12.21 | 14.9 | 24.1 | ..... | ..... | ..... | ..... | ..... |
| | 122 | 35.4 | 13.71 | 12.74 | 11.2 | 20.8 | ..... | ..... | ..... | ..... | ..... |
| | 123 | 25.5 | 13.58 | 12.61 | −11.5 | − 2.0 | ..... | ..... | ..... | ..... | ..... |
| | 124 | 22.5 | 13.58 | 12.61 | − 9.2 | 0.3 | ..... | ..... | ..... | ..... | ..... |
| | 125 | 38.5 | 15.17 | 14.20 | 9.0 | 19.7 | ..... | ..... | ..... | ..... | ..... |
| 503 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Aug. 21, '03 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| $10^h05^m$ | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 516 | 127 | −26.2 | 14.12 | 13.14 | 12.2 | 22.0 | 35.0 | ..... | ..... | ..... | ..... |
| Sept. 10, '03 | 128 | −30.0 | 13.26 | 12.28 | −10.2 | − 1.0 | 11.1 | ..... | ..... | ..... | ..... |
| $4^h20^m$ | 129 | −31.5 | 13.96 | 12.98 | 6.2 | 16.1 | ..... | ..... | ..... | ..... | ..... |
| | 130 | −28.2 | 13.83 | 12.85 | 5.3 | 15.0 | 27.6 | ..... | ..... | ..... | ..... |
| | 131 | 20.3 | 14.42 | 13.44 | −16.5 | − 6.7 | 6.8 | ..... | ..... | ..... | ..... |
| | 132 | 19.1 | 14.40 | 13.42 | −13.3 | − 3.1 | 10.0 | ..... | ..... | ..... | ..... |
| | 133 | 22.1 | 13.76 | 12.78 | −12.2 | − 2.4 | 10.0 | ..... | ..... | ..... | ..... |
| | 134 | 24.0 | 14.65 | 13.67 | −21.5 | −10.3 | 2.3 | ..... | ..... | ..... | ..... |
| | 135 | 24.5 | 14.36 | 13.38 | −18.4 | − 8.2 | ..... | ..... | ..... | ..... | ..... |
| | 136 | 20.7 | 14.34 | 13.36 | −25.5 | −15.2 | − 2.3 | ..... | ..... | ..... | ..... |
| | 137 | 20.8 | 14.10 | 13.12 | −27.9 | −17.7 | − 5.1 | ..... | ..... | ..... | ..... |
| | 138 | 19.9 | 14.11 | 13.13 | −31.3 | −21.3 | − 8.5 | ..... | ..... | ..... | ..... |
| | 139 | 23.1 | 14.09 | 13.11 | −27.9 | −17.9 | ..... | ..... | ..... | ..... | ..... |
| | 140 | 23.1 | 13.82 | 12.84 | −29.5 | −19.5 | − 7.2 | ..... | ..... | ..... | ..... |
| | 141 | 27.8 | 14.23 | 13.25 | −28.0 | −17.9 | ..... | ..... | ..... | ..... | ..... |
| | 142 | 27.3 | 14.24 | 13.26 | −25.0 | −15.1 | − 2.0 | ..... | ..... | ..... | ..... |
| | 143 | 14.6 | 14.69 | 13.71 | −20.8 | −10.4 | 3.0 | ..... | ..... | ..... | ..... |
| | 144 | 8.1 | 15.28 | 14.30 | −36.9 | −26.0 | ..... | ..... | ..... | ..... | ..... |
| | 145 | 19.3 | 13.36 | 12.38 | −35.0 | −25.4 | −13.5 | ..... | ..... | ..... | ..... |
| | 146 | 27.9 | 13.90 | 12.92 | − 7.8 | 1.7 | 14.6 | ..... | ..... | ..... | ..... |
| | 147 | 26.5 | 14.79 | 13.81 | − 5.0 | 5.8 | 19.0 | ..... | ..... | ..... | ..... |
| | 148 | 26.2 | 14.46 | 13.48 | − 3.1 | 7.1 | 20.3 | ..... | ..... | ..... | ..... |
| | 149 | 23.2 | 14.43 | 13.45 | − 4.2 | 5.5 | 19.1 | ..... | ..... | ..... | ..... |
| | 150 | 22.1 | 13.83 | 12.85 | − 2.8 | 7.0 | ..... | ..... | ..... | ..... | ..... |
| | 151 | 20.3 | 13.83 | 12.85 | 0.0 | 9.7 | 22.3 | ..... | ..... | ..... | ..... |
| | 152 | 21.6 | 13.82 | 12.84 | 0.8 | 10.8 | 23.1 | ..... | ..... | ..... | ..... |
| | 153 | 18.7 | 14.23 | 13.25 | 0.2 | 10.2 | 23.2 | ..... | ..... | ..... | ..... |
| | 154 | 15.6 | 14.30 | 13.32 | − 2.4 | 7.5 | 20.7 | ..... | ..... | ..... | ..... |
| | 155 | 17.2 | 14.34 | 13.36 | 9.6 | 19.8 | 32.8 | ..... | ..... | ..... | ..... |
| | 156 | 17.7 | 13.93 | 12.95 | 8.4 | 18.5 | 30.9 | ..... | ..... | ..... | ..... |
| | 157 | 22.9 | 14.36 | 13.38 | 10.0 | 20.2 | ..... | ..... | ..... | ..... | ..... |
| | 158 | 22.4 | 14.81 | 13.83 | 7.5 | 17.9 | 31.5 | ..... | ..... | ..... | ..... |

TABLE I—*Continued*

| Plate Number and Date | Number | Latitude | Diurnal Motion | | Longitudes on Days of Observation | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sidereal | Synodic | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 516 (*cont.*) | 159 | 25°6 | 14°06 | 13°08 | 5°9 | 15°8 | 28°6 | ..... | ..... | ..... | ..... |
| | 160 | 22.6 | 14.75 | 13.77 | 13.0 | 23.5 | ..... | ..... | ..... | ..... | ..... |
| | 161 | 18.3 | 14.33 | 13.35 | 21.5 | 32.0 | 44.7 | ..... | ..... | ..... | ..... |
| | 162 | 19.8 | 14.62 | 13.64 | 24.8 | 35.2 | ..... | ..... | ..... | ..... | ..... |
| | 163 | 17.0 | 13.70 | 12.72 | 34.5 | 44.2 | ..... | ..... | ..... | ..... | ..... |
| | 164 | 1.3 | 13.57 | 12.59 | 15.9 | 25.5 | ..... | ..... | ..... | ..... | ..... |
| | 165 | 10.4 | 14.88 | 13.90 | 19.1 | 29.7 | ..... | ..... | ..... | ..... | ..... |
| | 166 | 29.7 | 12.78 | 11.80 | 3.5 | 12.5 | ..... | ..... | ..... | ..... | ..... |
| | 167 | 14.0 | 13.96 | 12.98 | −12.2 | − 2.3 | ..... | ..... | ..... | ..... | ..... |
| | 168 | 17.2 | 14.85 | 13.87 | −28.1 | −17.2 | − 4.0 | ..... | ..... | ..... | ..... |
| | 169 | 22.8 | 13.57 | 12.59 | −23.2 | −13.6 | ..... | ..... | ..... | ..... | ..... |
| | 170 | −28.6 | 13.38 | 12.40 | 8.5 | 17.5 | 30.0 | ..... | ..... | ..... | ..... |
| | 171 | 17.3 | 14.32 | 13.34 | 13.0 | 23.8 | 36.2 | ..... | ..... | ..... | ..... |
| | 172 | 17.0 | 14.15 | 13.17 | 6.8 | 17.2 | 29.7 | ..... | ..... | ..... | ..... |
| | 173 | 12.0 | 15.08 | 14.10 | − 1.3 | 9.7 | 23.2 | ..... | ..... | ..... | ..... |
| | 174 | −19.5 | 13.82 | 12.84 | 5.2 | 15.2 | 27.5 | ..... | ..... | ..... | ..... |
| 519 | 175 | −15.3 | 15.05 | 14.07 | −41.4 | −27.7 | ..... | ..... | ..... | ..... | ..... |
| Sept. 11, '03 | 176 | −15.7 | 14.43 | 13.45 | −39.4 | −26.3 | ..... | ..... | ..... | ..... | ..... |
| $10^h38^m$ | 177 | −11.9 | 14.85 | 13.87 | −39.7 | −26.2 | ..... | ..... | ..... | ..... | ..... |
| | 178 | −22.4 | 13.61 | 12.63 | − 0.6 | 11.7 | ..... | ..... | ..... | ..... | ..... |
| | 179 | −38.1 | 13.71 | 12.73 | 0.7 | 13.1 | ..... | ..... | ..... | ..... | ..... |
| | 180 | −39.7 | 14.23 | 13.25 | − 1.0 | 11.9 | ..... | ..... | ..... | ..... | ..... |
| | 181 | −29.5 | 14.85 | 13.87 | −19.0 | − 5.5 | ..... | ..... | ..... | ..... | ..... |
| | 182 | −28.1 | 13.82 | 12.84 | 12.0 | 24.5 | ..... | ..... | ..... | ..... | ..... |
| | 183 | −31.5 | 13.41 | 12.43 | 14.0 | 26.1 | ..... | ..... | ..... | ..... | ..... |
| | 184 | −30.6 | 14.13 | 13.15 | 18.7 | 31.5 | ..... | ..... | ..... | ..... | ..... |
| | 185 | 15.4 | 14.13 | 13.15 | 4.9 | 17.7 | ..... | ..... | ..... | ..... | ..... |
| | 186 | 19.6 | 15.15 | 14.17 | 4.0 | 17.8 | ..... | ..... | ..... | ..... | ..... |
| | 187 | 20.8 | 14.74 | 13.76 | 1.9 | 15.3 | ..... | ..... | ..... | ..... | ..... |
| | 188 | 23.2 | 14.43 | 13.45 | 3.8 | 16.9 | ..... | ..... | ..... | ..... | ..... |
| | 189 | 17.9 | 13.92 | 12.94 | 14.9 | 27.5 | ..... | ..... | ..... | ..... | ..... |
| 523 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Sept. 12, '03 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| $10^h00^m$ | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 580 | 1 | −29.2 | 15.06 | 14.07 | −25.9 | −10.3 | ..... | ..... | ..... | ..... | ..... |
| Oct. 9, '03 | 2 | −27.3 | 14.14 | 13.15 | −30.0 | −15.5 | − 1.0 | ..... | ..... | ..... | ..... |
| $8^h22^m$ | 3 | −28.0 | 14.70 | 13.71 | −26.7 | −11.5 | ..... | ..... | ..... | ..... | ..... |
| | 4 | −23.9 | 14.28 | 13.29 | −35.3 | −20.8 | − 6.0 | ..... | ..... | ..... | ..... |
| | 5 | −19.2 | 13.19 | 12.20 | −14.7 | − 1.3 | 12.2 | ..... | ..... | ..... | ..... |
| | 6 | −23.9 | 14.24 | 13.25 | −14.8 | − 0.1 | ..... | ..... | ..... | ..... | ..... |
| | 7 | −24.3 | 14.33 | 13.34 | −44.6 | −29.8 | ..... | ..... | ..... | ..... | ..... |
| | 8 | −20.6 | 14.06 | 13.07 | −40.5 | −26.0 | ..... | ..... | ..... | ..... | ..... |
| | 9 | −20.2 | 13.61 | 12.62 | −42.0 | −28.0 | ..... | ..... | ..... | ..... | ..... |
| | 10 | −22.6 | 14.15 | 13.16 | −44.5 | −29.9 | ..... | ..... | ..... | ..... | ..... |
| | 11 | −15.5 | 14.05 | 13.06 | −26.6 | −12.0 | 2.2 | ..... | ..... | ..... | ..... |
| | 12 | −22.3 | 14.05 | 13.06 | −21.7 | − 7.5 | 7.1 | ..... | ..... | ..... | ..... |
| | 13 | −16.7 | 13.64 | 12.65 | −23.7 | − 9.3 | 4.2 | ..... | ..... | ..... | ..... |
| | 14 | 17.1 | 14.60 | 13.61 | 14.5 | 29.6 | 44.5 | ..... | ..... | ..... | ..... |
| | 15 | 16.6 | 14.46 | 13.47 | 12.2 | 27.2 | 41.9 | ..... | ..... | ..... | ..... |
| | 16 | 16.5 | 14.10 | 13.11 | 9.8 | 24.2 | 38.7 | ..... | ..... | ..... | ..... |
| | 17 | 11.4 | 14.97 | 13.98 | 7.2 | 22.7 | ..... | ..... | ..... | ..... | ..... |
| | 18 | 12.9 | 14.60 | 13.61 | 6.1 | 21.3 | 36.1 | ..... | ..... | ..... | ..... |
| | 19 | 14.6 | 14.60 | 13.61 | 3.2 | 18.8 | 33.2 | ..... | ..... | ..... | ..... |
| | 20 | 20.0 | 14.64 | 13.65 | − 3.9 | 11.2 | 26.2 | ..... | ..... | ..... | ..... |
| | 21 | 20.2 | 13.82 | 12.83 | 12.2 | 26.2 | 40.5 | ..... | ..... | ..... | ..... |
| | 22 | 22.5 | 14.24 | 13.25 | 10.9 | 25.6 | ..... | ..... | ..... | ..... | ..... |
| | 23 | 26.7 | 14.33 | 13.34 | − 2.0 | 12.8 | ..... | ..... | ..... | ..... | ..... |
| | 24 | 26.7 | 13.87 | 12.88 | 3.7 | 18.0 | 32.1 | ..... | ..... | ..... | ..... |
| | 25 | −18.7 | 14.51 | 13.52 | 31.9 | 46.9 | ..... | ..... | ..... | ..... | ..... |
| | 26 | −15.7 | 12.98 | 11.99 | − 9.0 | 4.3 | ..... | ..... | ..... | ..... | ..... |
| | 27 | 7.2 | 13.83 | 12.84 | 13.1 | 28.1 | 41.4 | ..... | ..... | ..... | ..... |
| | 28 | −12.7 | 14.06 | 13.07 | −17.7 | − 3.2 | ..... | ..... | ..... | ..... | ..... |
| | 29 | 20.4 | 14.60 | 13.61 | 29.7 | 44.8 | ..... | ..... | ..... | ..... | ..... |
| | 34 | 23.2 | 13.52 | 12.53 | −16.5 | − 2.6 | ..... | ..... | ..... | ..... | ..... |
| | 35 | 22.9 | 14.24 | 13.25 | 23.3 | 38.0 | ..... | ..... | ..... | ..... | ..... |
| | 36 | 19.0 | 14.33 | 13.34 | −16.0 | − 1.2 | ..... | ..... | ..... | ..... | ..... |

TABLE I—*Continued*

| Plate Number and Date | Number | Latitude | Diurnal Motion | | Longitudes on Days of Observation | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sidereal | Synodic | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 605 | 30 | −24°1 | 14°31 | 13°32 | −14°7 | − 0°1 | ..... | ..... | ..... | ..... | ..... |
| Oct. 10, '03 | 32 | 22.3 | 14.13 | 13.14 | 1.8 | 16.2 | ..... | ..... | ..... | ..... | ..... |
| 10h59m | 33 | 23.5 | 14.68 | 13.69 | − 5.0 | 10.0 | ..... | ..... | ..... | ..... | ..... |
| 611 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Oct. 11, '03 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 1h17m | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| S28 | 190 | 18.0 | 14.33 | 13.32 | 7.2 | 18.0 | ..... | ..... | ..... | ..... | ..... |
| Mar. 7, '04 | 191 | 12.7 | 13.96 | 12.95 | 5.8 | 16.3 | ..... | ..... | ..... | ..... | ..... |
| 2h22m | 192 | 22.0 | 14.45 | 13.44 | 6.2 | 17.1 | ..... | ..... | ..... | ..... | ..... |
| | 193 | 17.5 | 13.83 | 12.82 | − 6.4 | 4.0 | ..... | ..... | ..... | ..... | ..... |
| | 194 | 15.0 | 14.70 | 13.69 | − 4.2 | 6.9 | ..... | ..... | ..... | ..... | ..... |
| | 195 | 15.7 | 14.20 | 13.19 | 1.9 | 12.6 | ..... | ..... | ..... | ..... | ..... |
| | 196 | 14.1 | 14.20 | 13.19 | 2.9 | 13.6 | ..... | ..... | ..... | ..... | ..... |
| | 197 | 18.8 | 13.96 | 12.95 | 0.7 | 11.2 | ..... | ..... | ..... | ..... | ..... |
| | 198 | 20.8 | 15.06 | 14.05 | 2.2 | 13.6 | ..... | ..... | ..... | ..... | ..... |
| | 199 | 26.4 | 13.96 | 12.95 | 15.4 | 25.9 | ..... | ..... | ..... | ..... | ..... |
| | 200 | 25.0 | 13.83 | 12.82 | 13.0 | 23.4 | ..... | ..... | ..... | ..... | ..... |
| | 201 | 18.3 | 13.46 | 12.45 | − 8.3 | 1.8 | ..... | ..... | ..... | ..... | ..... |
| | 202 | 19.6 | 13.83 | 12.82 | − 7.1 | 3.3 | ..... | ..... | ..... | ..... | ..... |
| | 203 | 20.5 | 13.46 | 12.45 | − 5.1 | 5.0 | ..... | ..... | ..... | ..... | ..... |
| | 204 | 24.9 | 13.96 | 12.95 | −19.3 | − 8.8 | ..... | ..... | ..... | ..... | ..... |
| | 205 | 26.7 | 14.08 | 13.07 | −38.1 | −27.5 | ..... | ..... | ..... | ..... | ..... |
| | 206 | 26.5 | 13.83 | 12.82 | −39.5 | −29.1 | ..... | ..... | ..... | ..... | ..... |
| | 207 | 21.2 | 13.71 | 12.70 | −18.6 | − 8.3 | ..... | ..... | ..... | ..... | ..... |
| | 208 | − 5.0 | 13.71 | 12.70 | 35.5 | 45.8 | ..... | ..... | ..... | ..... | ..... |
| | 209 | 13.1 | 14.70 | 13.69 | − 6.2 | 4.9 | ..... | ..... | ..... | ..... | ..... |
| | 210 | 16.9 | 14.08 | 13.07 | −10.6 | 0.0 | ..... | ..... | ..... | ..... | ..... |
| | 211 | 17.3 | 13.59 | 12.58 | −17.5 | − 7.3 | ..... | ..... | ..... | ..... | ..... |
| | 212 | 15.0 | 13.46 | 12.45 | −15.0 | − 4.9 | ..... | ..... | ..... | ..... | ..... |
| | 213 | 13.0 | 14.33 | 13.32 | −15.4 | − 4.6 | ..... | ..... | ..... | ..... | ..... |
| | 214 | 10.4 | 14.33 | 13.32 | −16.5 | − 5.7 | ..... | ..... | ..... | ..... | ..... |
| | 215 | 17.0 | 15.19 | 14.18 | −13.8 | − 2.3 | ..... | ..... | ..... | ..... | ..... |
| | 216 | 15.5 | 14.08 | 13.07 | −13.6 | − 3.0 | ..... | ..... | ..... | ..... | ..... |
| | 217 | −18.4 | 15.56 | 14.55 | −22.0 | −10.2 | ..... | ..... | ..... | ..... | ..... |
| | 218 | −17.8 | 14.70 | 13.69 | −28.0 | −16.9 | ..... | ..... | ..... | ..... | ..... |
| | 219 | −22.2 | 14.08 | 13.07 | −24.6 | −14.0 | ..... | ..... | ..... | ..... | ..... |
| | 220 | −32.3 | 14.94 | 13.93 | −16.5 | − 5.2 | ..... | ..... | ..... | ..... | ..... |
| | 221 | −30.8 | 13.59 | 12.58 | − 6.1 | 4.1 | ..... | ..... | ..... | ..... | ..... |
| | 222 | −19.9 | 14.57 | 13.56 | 3.0 | 14.0 | ..... | ..... | ..... | ..... | ..... |
| | 223 | 17.1 | 13.83 | 12.82 | −22.0 | −11.6 | ..... | ..... | ..... | ..... | ..... |
| | 224 | 17.6 | 13.83 | 12.82 | −20.5 | −10.1 | ..... | ..... | ..... | ..... | ..... |
| S32 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Mar. 8, '04 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 9h50m | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 854 | 225 | −10.2 | 14.19 | 13.21 | −24.2 | − 8.8 | 4°9 | ..... | 29°3 | ..... | ..... |
| Apr. 12, '04 | 226 | 16.4 | 13.96 | 12.98 | −19.9 | − 5.7 | 6.8 | ..... | ..... | ..... | ..... |
| 9h26m | 227 | 11.7 | 14.73 | 13.75 | −21.2 | − 6.5 | 7.1 | ..... | ..... | ..... | ..... |
| | 228 | 23.1 | 13.75 | 12.77 | 6.3 | 20.2 | ..... | ..... | ..... | ..... | ..... |
| | 229 | 16.6 | 14.22 | 13.24 | −16.9 | − 2.2 | 10.3 | ..... | 36.7 | ..... | ..... |
| | 230 | −10.3 | 15.12 | 14.14 | −17.1 | − 1.7 | 12.0 | ..... | ..... | ..... | ..... |
| | 231 | −17.7 | 13.86 | 12.88 | 13.9 | 28.1 | 40.4 | ..... | ..... | ..... | ..... |
| | 232 | −16.7 | 14.76 | 13.78 | 18.1 | 33.1 | ..... | ..... | ..... | ..... | ..... |
| | 233 | −14.4 | 13.94 | 12.96 | 19.8 | 33.9 | ..... | ..... | ..... | ..... | ..... |
| | 234 | −12.8 | 14.76 | 13.78 | 17.0 | 32.0 | ..... | ..... | ..... | ..... | ..... |
| | 235 | −20.8 | 14.40 | 13.42 | 31.3 | 45.9 | ..... | ..... | ..... | ..... | ..... |
| | 236 | −17.0 | 14.30 | 13.32 | 28.0 | 42.5 | ..... | ..... | ..... | ..... | ..... |
| | 237 | −14.2 | 14.54 | 13.56 | −24.0 | − 9.1 | 3.9 | ..... | ..... | ..... | ..... |
| | 238 | −19.3 | 14.93 | 13.95 | −19.5 | − 4.1 | 9.2 | ..... | ..... | ..... | ..... |
| | 239 | −17.9 | 14.01 | 13.03 | −28.5 | −14.2 | − 1.7 | ..... | ..... | ..... | ..... |
| | 240 | −14.3 | 14.59 | 13.61 | −25.9 | −10.9 | 2.1 | ..... | ..... | ..... | ..... |
| | 241 | −16.8 | 14.12 | 13.14 | −17.0 | − 2.7 | ..... | ..... | ..... | ..... | ..... |
| | 242 | −19.7 | 14.11 | 13.13 | −40.1 | −25.9 | −12.9 | ..... | 12.9 | ..... | ..... |

TABLE I—*Continued*

| Plate Number and Date | Number | Latitude | Diurnal Motion | | Longitudes on Days of Observation | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sidereal | Synodic | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 854 (*cont.*) | 243 | −20°0 | 14°39 | 13°41 | 20°5 | 34°9 | 48°1 | ..... | ..... | ..... | ..... |
| | 244 | −19.8 | 13.94 | 12.96 | 23.2 | 37.3 | ..... | ..... | ..... | ..... | ..... |
| | 245 | −20.3 | 14.73 | 13.75 | −25.0 | −10.0 | 3.3 | ..... | ..... | ..... | ..... |
| | 246 | −21.4 | 13.94 | 12.96 | 26.4 | 40.5 | ..... | ..... | ..... | ..... | ..... |
| | 247 | 29.7 | 13.57 | 12.59 | 16.3 | 30.0 | ..... | ..... | ..... | ..... | ..... |
| | 248 | −13.4 | 14.00 | 13.02 | −17.3 | − 3.0 | 9.9 | ..... | 37°3 | ..... | ..... |
| | 249 | − 9.8 | 14.76 | 13.78 | −20.2 | − 5.2 | ..... | ..... | ..... | ..... | ..... |
| | 250 | 21.8 | 13.57 | 12.59 | −26.6 | −12.9 | ..... | ..... | ..... | ..... | ..... |
| | 251 | 20.2 | 14.12 | 13.14 | −28.9 | −14.6 | ..... | ..... | ..... | ..... | ..... |
| | 252 | 12.4 | 13.73 | 12.75 | −37.8 | −23.1 | −11.7 | ..... | 14.0 | ..... | ..... |
| | 253 | −16.4 | 14.21 | 13.23 | 7.3 | 21.7 | ..... | ..... | ..... | ..... | ..... |
| | 254 | −21.6 | 13.57 | 12.59 | 2.7 | 16.4 | ..... | ..... | ..... | ..... | ..... |
| | 255 | −20.9 | 13.90 | 12.92 | 5.9 | 19.7 | 32.5 | ..... | ..... | ..... | ..... |
| | 256 | 22.8 | 14.12 | 13.14 | − 4.8 | 9.5 | ..... | ..... | ..... | ..... | ..... |
| | 257 | 30.5 | 12.83 | 11.85 | −30.3 | −17.7 | − 5.9 | ..... | ..... | ..... | ..... |
| | 258 | 38.8 | 9.89 | 8.91 | −33.3 | −23.6 | ..... | ..... | ..... | ..... | ..... |
| | 259 | 34.1 | 13.66 | 12.68 | −36.6 | −12.8 | ..... | ..... | ..... | ..... | ..... |
| | 260 | 43.4 | 12.10 | 11.12 | − 7.0 | 5.1 | ..... | ..... | ..... | ..... | ..... |
| | 261 | 53.9 | 12.38 | 11.40 | −17.3 | − 4.9 | ..... | ..... | ..... | ..... | ..... |
| | 266 | −21.7 | 14.04 | 13.06 | −43.7 | −30.2 | −16.8 | ..... | ..... | ..... | ..... |
| 858 | 262 | −18.4 | 14.08 | 13.10 | 7.7 | 20.4 | ..... | ..... | ..... | ..... | ..... |
| Apr. 13, '04 | 263 | −20.6 | 14.08 | 13.10 | 6.7 | 19.4 | ..... | ..... | ..... | ..... | ..... |
| 11h33m | 264 | −21.7 | 13.87 | 12.89 | 8.2 | 20.7 | ..... | ..... | ..... | ..... | ..... |
| | 265 | −20.8 | 14.91 | 13.93 | −28.9 | −15.4 | ..... | ..... | ..... | ..... | ..... |
| | 267 | 10.5 | 14.41 | 13.43 | −37.7 | −25.2 | ..... | 1°9 | ..... | 29°5 | 41°3 |
| | 268 | 11.3 | 12.74 | 11.76 | −38.0 | −26.6 | ..... | ..... | ..... | ..... | ..... |
| | 269 | 11.9 | 13.98 | 13.00 | −37.0 | −24.4 | ..... | ..... | ..... | ..... | ..... |
| | 270 | 16.2 | 13.98 | 13.00 | −38.1 | −25.5 | ..... | ..... | ..... | ..... | ..... |
| | 271 | 15.8 | 14.22 | 13.24 | −33.8 | −22.9 | ..... | 4.9 | ..... | ..... | ..... |
| | 272 | 7.5 | 14.49 | 13.51 | 3.2 | 16.3 | ..... | ..... | ..... | ..... | ..... |
| | 273 | 10.9 | 14.55 | 13.57 | 1.3 | 14.1 | ..... | 41.3 | ..... | ..... | ..... |
| | 274 | 9.8 | 14.35 | 13.37 | − 3.9 | 9.6 | ..... | 35.7 | ..... | ..... | ..... |
| | 275 | −19.2 | 15.32 | 14.34 | 13.2 | 27.1 | ..... | ..... | ..... | ..... | ..... |
| | 276 | −20.1 | 15.11 | 14.13 | −35.9 | −22.2 | ..... | ..... | ..... | ..... | ..... |
| | 277 | 4.1 | 14.55 | 13.57 | −42.0 | −28.3 | ..... | − 0.8 | ..... | 26.5 | 38.1 |
| | 278 | 8.1 | 14.34 | 13.36 | −41.7 | −28.5 | ..... | − 2.2 | ..... | ..... | ..... |
| | 279 | 27.5 | 13.87 | 12.89 | −45.9 | −33.4 | ..... | ..... | ..... | ..... | ..... |
| 864 | 280 | 22.3 | 14.18 | 13.20 | 2.1 | ..... | 28.3 | ..... | ..... | ..... | ..... |
| Apr. 14, '04 | 281 | −22.6 | 12.82 | 11.84 | −28.9 | ..... | − 5.4 | ..... | ..... | ..... | ..... |
| 10h49m | 282 | −12.2 | 14.28 | 13.30 | −48.0 | ..... | −21.6 | ..... | ..... | ..... | ..... |
| | 283 | −14.8 | 14.40 | 13.42 | −48.1 | ..... | −21.9 | ..... | 6.1 | 18.0 | ..... |
| | 284 | 19.6 | 14.44 | 13.46 | −27.5 | ..... | − 0.8 | ..... | ..... | ..... | ..... |
| | 285 | 23.5 | 13.83 | 12.85 | −24.4 | ..... | 1.1 | ..... | ..... | ..... | ..... |
| | 286 | 13.0 | 13.95 | 12.97 | −34.1 | ..... | −10.5 | ..... | 16.2 | 28.9 | 44.3 |
| | 287 | 16.7 | 13.53 | 12.55 | −40.5 | ..... | −15.6 | ..... | ..... | ..... | ..... |
| 867 | 288 | − 6.2 | 14.99 | 14.01 | −29.6 | ..... | − 1.1 | 11.9 | ..... | ..... | ..... |
| Apr. 16, '04 | 289 | −17.3 | 14.42 | 13.44 | −27.8 | ..... | 0.0 | 12.0 | 26.8 | ..... | ..... |
| 10h26m | | | | | | | | | | | |
| 869 | 291 | −22.1 | 13.65 | 12.67 | 32.9 | 44.6 | ..... | ..... | ..... | ..... | ..... |
| Apr. 18, '04 | 292 | −24.0 | 14.19 | 13.21 | 32.1 | 44.3 | ..... | ..... | ..... | ..... | ..... |
| 11h21m | 293 | −23.1 | 14.84 | 13.86 | 28.0 | 40.8 | ..... | ..... | ..... | ..... | ..... |
| | 294 | 7.2 | 14.19 | 13.21 | 25.5 | 37.7 | ..... | ..... | ..... | ..... | ..... |
| | 295 | 8.7 | 14.30 | 13.32 | 24.6 | 36.9 | ..... | ..... | ..... | ..... | ..... |
| | 296 | 16.1 | 13.86 | 12.88 | 29.1 | 41.0 | ..... | ..... | ..... | ..... | ..... |
| | 297 | 17.3 | 13.86 | 12.88 | 26.9 | 38.8 | ..... | ..... | ..... | ..... | ..... |
| | 298 | 14.6 | 14.08 | 13.10 | 21.5 | 33.6 | ..... | ..... | ..... | ..... | ..... |
| | 299 | 9.1 | 14.62 | 13.64 | 20.9 | 33.5 | ..... | ..... | ..... | ..... | ..... |
| | 300 | 8.2 | 14.45 | 13.47 | 18.2 | 30.0 | 45.4 | ..... | ..... | ..... | ..... |
| | 301 | 22.2 | 14.08 | 13.10 | 15.2 | 27.3 | ..... | ..... | ..... | ..... | ..... |
| | 302 | 15.5 | 14.34 | 13.36 | 13.5 | 25.7 | 40.5 | ..... | ..... | ..... | ..... |
| | 303 | 17.9 | 12.56 | 11.58 | 10.8 | 21.5 | ..... | ..... | ..... | ..... | ..... |
| | 304 | 10.9 | 13.97 | 12.99 | 14.5 | 26.5 | ..... | ..... | ..... | ..... | ..... |
| | 305 | 7.1 | 15.00 | 14.02 | 12.0 | 24.3 | 40.3 | ..... | ..... | ..... | ..... |
| | 306 | 12.5 | 13.54 | 12.56 | 10.8 | 22.4 | ..... | ..... | ..... | ..... | ..... |
| | 307 | 11.2 | 13.76 | 12.78 | 9.3 | 21.1 | ..... | ..... | ..... | ..... | ..... |
| | 308 | 21.9 | 14.04 | 13.06 | 3.0 | 15.8 | 29.9 | 41.2 | ..... | ..... | ..... |

TABLE I—*Continued*

| Plate Number and Date | Number | Latitude | Diurnal Motion | | Longitudes on Days of Observation | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sidereal | Synodic | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 869 (*cont.*) | 309 | 20°.5 | 14°.33 | 13°.35 | −22°.9 | −10°.6 | 4°.2 | 16°.0 | ..... | ..... | ..... |
| | 310 | 18.0 | 13.74 | 12.76 | −22.3 | −10.4 | 3.5 | ..... | ..... | ..... | ..... |
| | 311 | 15.7 | 14.45 | 13.47 | −20.6 | − 7.9 | 6.6 | 18.8 | ..... | ..... | ..... |
| | 312 | 15.9 | 14.36 | 13.38 | −23.3 | −11.0 | 3.5 | 15.8 | ..... | ..... | ..... |
| | 313 | 13.9 | 14.84 | 13.86 | −26.1 | −13.3 | ..... | ..... | ..... | ..... | ..... |
| | 314 | 16.3 | 14.73 | 13.75 | −26.7 | −14.0 | ..... | ..... | ..... | ..... | ..... |
| | 315 | 17.3 | 13.65 | 12.67 | −28.3 | −16.6 | ..... | ..... | ..... | ..... | ..... |
| | 316 | 15.1 | 13.76 | 12.78 | −32.3 | −20.8 | − 6.8 | 5.0 | ..... | ..... | ..... |
| | 317 | 17.5 | 14.51 | 13.53 | −38.3 | −25.8 | ..... | ..... | ..... | ..... | ..... |
| | 318 | 21.8 | 14°00 | 13.02 | −38.0 | −25.5 | −11.5 | 0.1 | ..... | ..... | ..... |
| | 319 | 21.6 | 13.97 | 12.99 | −40.3 | −28.3 | ..... | ..... | ..... | ..... | ..... |
| | 320 | − 2.4 | 13.76 | 12.78 | 31.0 | 42.8 | ..... | ..... | ..... | ..... | ..... |
| | 321 | −16.6 | 14.62 | 13.64 | 5.0 | 17.6 | ..... | ..... | ..... | ..... | ..... |
| | 322 | −19.6 | 13.97 | 12.99 | 2.5 | 14.5 | ..... | ..... | ..... | ..... | ..... |
| | 323 | −26.0 | 13.76 | 12.78 | 31.8 | 43.6 | ..... | ..... | ..... | ..... | ..... |
| | 324 | 26.6 | 14.30 | 13.32 | 26.5 | 38.8 | ..... | ..... | ..... | ..... | ..... |
| | 325 | 20.8 | 13.97 | 12.99 | 21.1 | 33.1 | ..... | ..... | ..... | ..... | ..... |
| | 326 | 16.0 | 13.86 | 12.88 | 2.1 | 13.9 | 28.5 | 39.5 | ..... | ..... | ..... |
| | 327 | 13.1 | 14.26 | 13.28 | 1.6 | 13.8 | 29.0 | 40.1 | ..... | ..... | ..... |
| | 328 | 18.7 | 14.19 | 13.21 | 2.0 | 14.2 | ..... | ..... | ..... | ..... | ..... |
| | 329 | 26.2 | 13.97 | 12.99 | 4.4 | 16.2 | 30.7 | 42.2 | ..... | ..... | ..... |
| 872 | 330 | 20.9 | 13.47 | 12.50 | −20.2 | − 6.2 | 4.7 | ..... | ..... | ..... | ..... |
| Apr. 19, '04 | 331 | −22.9 | 14.31 | 13.37 | −18.5 | − 3.1 | 8.1 | ..... | ..... | ..... | ..... |
| $9^h31^m$ | 332 | −17.4 | 14.64 | 13.67 | 19.9 | 34.9 | ..... | ..... | ..... | ..... | ..... |
| | 333 | −18.1 | 14.71 | 13.74 | 19.1 | 34.1 | 46.5 | ..... | ..... | ..... | ..... |
| | 334 | 24.5 | 14.27 | 13.30 | 14.5 | 29.3 | 41.0 | ..... | ..... | ..... | ..... |
| | 335 | − 7.4 | 14.82 | 13.85 | 9.5 | 25.0 | 37.1 | ..... | ..... | ..... | ..... |
| 876 | 336 | − 4.5 | 14.81 | 13.84 | 27.8 | 40.2 | ..... | ..... | ..... | ..... | ..... |
| Apr. 20, '04 | 337 | 20.5 | 14.13 | 13.16 | − 2.9 | 8.9 | ..... | ..... | ..... | ..... | ..... |
| $11^h52^m$ | 338 | 12.5 | 14.48 | 13.51 | 1.6 | 13.7 | ..... | ..... | ..... | ..... | ..... |
| | 339 | 8.8 | 14.25 | 13.28 | 4.2 | 16.1 | ..... | ..... | ..... | ..... | ..... |
| | 340 | 3.9 | 15.15 | 14.18 | 3.4 | 16.1 | ..... | ..... | ..... | ..... | ..... |
| | 341 | 24.8 | 14.48 | 13.51 | 5.7 | 17.8 | ..... | ..... | ..... | ..... | ..... |
| | 342 | 29.0 | 14.03 | 13.06 | − 2.7 | 9.0 | ..... | ..... | ..... | ..... | ..... |
| | 343 | 14.4 | 14.13 | 13.16 | −30.9 | −19.1 | ..... | ..... | ..... | ..... | ..... |
| | 344 | 14.6 | 14.37 | 13.40 | −34.8 | −22.8 | ..... | ..... | ..... | ..... | ..... |
| | 345 | 13.2 | 14.92 | 13.95 | −40.4 | −27.9 | ..... | ..... | ..... | ..... | ..... |
| | 346 | 21.1 | 13.47 | 12.50 | −14.1 | − 2.9 | ..... | ..... | ..... | ..... | ..... |
| | 347 | 20.8 | 14.03 | 13.06 | −22.7 | −11.0 | ..... | ..... | ..... | ..... | ..... |
| | 348 | 21.0 | 15.03 | 14.06 | −30.8 | −18.2 | ..... | ..... | ..... | ..... | ..... |
| | 349 | 26.8 | 14.13 | 13.16 | −35.9 | −24.1 | ..... | ..... | ..... | ..... | ..... |
| | 350 | 14.0 | 14.37 | 13.40 | − 9.3 | 2.7 | ..... | ..... | ..... | ..... | ..... |
| | 351 | −14.3 | 14.13 | 13.16 | −48.1 | −36.3 | ..... | ..... | ..... | ..... | ..... |
| 881 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Apr. 21, '04 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| $9^h22^m$ | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 891 | 352 | −27.1 | 14.44 | 13.47 | 3.8 | 16.2 | ..... | ..... | ..... | ..... | ..... |
| Apr. 26, '04 | 353 | −27.7 | 14.33 | 13.36 | − 1.0 | 11.4 | ..... | ..... | ..... | ..... | ..... |
| $12^h00^m$ | 354 | −15.8 | 14.44 | 13.47 | − 5.0 | 7.5 | 21.7 | ..... | ..... | ..... | ..... |
| | 355 | −19.2 | 13.47 | 12.50 | 6.5 | 18.1 | ..... | ..... | ..... | ..... | ..... |
| | 356 | −17.3 | 14.47 | 13.50 | − 7.8 | 3.5 | 18.9 | ..... | ..... | ..... | ..... |
| | 357 | −18.9 | 14.79 | 13.82 | −14.4 | − 1.2 | 13.0 | ..... | ..... | ..... | ..... |
| | 358 | 17.8 | 14.19 | 13.22 | − 2.3 | 10.0 | 23.9 | ..... | ..... | ..... | ..... |
| | 359 | 18.0 | 14.55 | 13.58 | −10.9 | 1.4 | 15.7 | 29.8 | 42°.8 | ..... | ..... |
| | 360 | 16.1 | 14.19 | 13.22 | − 7.5 | 4.8 | 18.7 | ..... | ..... | ..... | ..... |
| | 361 | 11.0 | 14.46 | 13.49 | −10.7 | 1.8 | 16.0 | 29.7 | ..... | ..... | ..... |
| | 362 | 9.5 | 14.29 | 13.32 | −14.5 | − 2.0 | 11.9 | ..... | ..... | ..... | ..... |
| | 363 | 11.4 | 13.79 | 12.82 | −13.8 | − 1.9 | ..... | ..... | ..... | ..... | ..... |
| | 364 | 12.6 | 14.12 | 13.15 | −14.9 | − 2.7 | ..... | ..... | ..... | ..... | ..... |
| | 365 | 16.5 | 14.35 | 13.38 | −15.9 | − 3.8 | 10.6 | ..... | ..... | ..... | ..... |
| | 366 | 21.5 | 13.90 | 12.93 | −14.7 | − 2.7 | ..... | ..... | ..... | ..... | ..... |
| | 367 | 20.4 | 14.12 | 13.15 | −19.8 | − 7.6 | ..... | ..... | ..... | ..... | ..... |
| | 368 | 23.7 | 14.09 | 13.12 | −35.9 | −23.7 | − 9.9 | ..... | ..... | ..... | ..... |
| | 369 | 17.0 | 14.39 | 13.42 | −29.9 | −17.6 | − 3.3 | ..... | ..... | ..... | ..... |

TABLE I—*Continued*

| Plate Number and Date | Number | Latitude | Diurnal Motion | | Longitudes on Days of Observation | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sidereal | Synodic | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 891 (*cont.*) | 370 | 17°7 | 14°30 | 13°33 | −26°0 | −14°0 | 0°4 | ..... | ..... | ..... | ..... |
| | 371 | 14.3 | 14.94 | 13.97 | −26.6 | −13.2 | 1.1 | ..... | ..... | ..... | ..... |
| | 372 | 20.2 | 13.69 | 12.72 | −35.8 | −24.0 | ..... | ..... | ..... | ..... | ..... |
| | 373 | 19.1 | 13.79 | 12.82 | −20.5 | − 8.6 | ..... | ..... | ..... | ..... | ..... |
| | 374 | −16.8 | 13.89 | 12.92 | 10.2 | 22.1 | 36.3 | 48°7 | ..... | ..... | ..... |
| | 375 | −18.1 | 14.98 | 14.01 | 32.1 | 45.1 | ..... | ..... | ..... | ..... | ..... |
| | 376 | −15.7 | 13.47 | 12.50 | 32.9 | 44.5 | ..... | ..... | ..... | ..... | ..... |
| | 378 | 24.8 | 14.01 | 13.04 | −33.1 | −21.0 | ..... | ..... | ..... | ..... | ..... |
| | 379 | 27.2 | 14.22 | 13.25 | −32.3 | −20.0 | ..... | ..... | ..... | ..... | ..... |
| | 380 | −14.0 | 14.33 | 13.36 | −17.2 | − 5.4 | 7.9 | 22.2 | 35°8 | ..... | ..... |
| | 381 | −11.6 | 12.93 | 11.96 | −15.7 | − 4.6 | ..... | ..... | ..... | ..... | ..... |
| | 382 | −11.5 | 14.36 | 13.39 | −10.0 | 1.3 | 16.1 | 29.8 | 42.7 | ..... | ..... |
| | 383 | − 6.8 | 13.63 | 12.66 | − 5.3 | 6.1 | 20.0 | 32.4 | ..... | ..... | ..... |
| | 384 | − 8.0 | 13.90 | 12.93 | −17.0 | − 4.8 | 8.0 | 21.3 | 34.6 | ..... | ..... |
| | 385 | 13.5 | 13.58 | 12.61 | −35.2 | −23.5 | ..... | ..... | ..... | ..... | ..... |
| | 386 | −17.5 | 14.44 | 13.47 | −19.5 | − 7.0 | ..... | ..... | ..... | ..... | ..... |
| | 387 | 10.3 | 13.94 | 12.97 | 17.4 | 29.0 | 43.1 | ..... | ..... | ..... | ..... |
| | 388 | 15.3 | 13.58 | 12.61 | 2.2 | 13.9 | 27.2 | ..... | ..... | ..... | ..... |
| | 389 | 16.7 | 14.24 | 13.27 | 4.8 | 17.1 | 31.1 | ..... | ..... | ..... | ..... |
| 897 | 390 | −18.5 | 14.66 | 13.69 | 8.0 | 21.9 | 36.3 | ..... | ..... | ..... | ..... |
| Apr. 27, '04 | 391 | −18.1 | 14.57 | 13.60 | 9.8 | 23.7 | 37.9 | ..... | ..... | ..... | ..... |
| $10^h16^m$ | 392 | −15.6 | 14.48 | 13.51 | 15.0 | 29.4 | 42.9 | ..... | ..... | ..... | ..... |
| | 393 | 8.9 | 14.09 | 13.12 | 10.2 | 24.2 | 37.3 | ..... | ..... | ..... | ..... |
| | 394 | 17.5 | 14.06 | 13.09 | 12.3 | 26.1 | ..... | ..... | ..... | ..... | ..... |
| | 395 | 20.6 | 14.06 | 13.09 | 6.7 | 20.4 | 33.6 | 46.5 | ..... | ..... | ..... |
| | 396 | 22.0 | 14.35 | 13.38 | 8.0 | 22.1 | ..... | ..... | ..... | ..... | ..... |
| | 397 | 22.7 | 13.87 | 12.90 | 6.3 | 19.9 | ..... | ..... | ..... | ..... | ..... |
| | 398 | 14.0 | 14.44 | 13.47 | − 4.9 | 9.3 | ..... | ..... | ..... | ..... | ..... |
| | 399 | 18.0 | 14.15 | 13.18 | − 6.7 | 7.0 | 20.2 | 33.4 | ..... | ..... | ..... |
| | 400 | 14.1 | 14.16 | 13.19 | −41.6 | −27.7 | ..... | ..... | ..... | ..... | ..... |
| | 401 | −14.6 | 14.76 | 13.79 | 9.9 | 24.2 | 38.4 | ..... | ..... | ..... | ..... |
| | 402 | −18.4 | 14.63 | 13.66 | 1.0 | 15.4 | ..... | ..... | ..... | ..... | ..... |
| | 403 | −11.2 | 14.44 | 13.47 | − 2.9 | 11.3 | ..... | ..... | ..... | ..... | ..... |
| 906 | 404 | −26.4 | 14.02 | 13.05 | 29.3 | 42.5 | ..... | ..... | ..... | ..... | ..... |
| Apr. 28, '04 | 405 | −32.6 | 13.22 | 12.25 | 20.9 | 33.3 | ..... | ..... | ..... | ..... | ..... |
| $11^h34^m$ | 406 | −28.9 | 13.82 | 12.85 | 20.9 | 33.9 | ..... | ..... | ..... | ..... | ..... |
| | 407 | −25.8 | 13.82 | 12.85 | 21.3 | 34.3 | ..... | ..... | ..... | ..... | ..... |
| | 408 | −17.0 | 14.72 | 13.75 | 7.4 | 21.5 | 34.7 | ..... | ..... | ..... | ..... |
| | 409 | 11.8 | 14.02 | 13.05 | 18.7 | 31.9 | 44.6 | ..... | ..... | ..... | ..... |
| | 410 | −18.1 | 14.42 | 13.45 | 5.1 | 18.8 | 31.8 | ..... | ..... | ..... | ..... |
| | 411 | 21.0 | 13.51 | 12.54 | 4.9 | 18.0 | 29.8 | ..... | ..... | ..... | ..... |
| | 412 | −13.4 | 14.32 | 13.35 | 6.0 | 19.9 | 32.5 | ..... | ..... | ..... | ..... |
| | 413 | −13.8 | 14.81 | 13.84 | 4.1 | 18.1 | ..... | ..... | ..... | ..... | ..... |
| | 414 | − 9.1 | 14.31 | 13.34 | 23.0 | 36.5 | ..... | ..... | ..... | ..... | ..... |
| | 415 | −12.7 | 14.37 | 13.40 | 20.7 | 34.3 | 47.3 | ..... | ..... | ..... | ..... |
| 913 | 416 | − 8.9 | 14.73 | 13.76 | 32.9 | 46.3 | ..... | ..... | ..... | ..... | ..... |
| Apr. 29, '04 | 417 | −16.6 | 14.73 | 13.76 | 26.0 | 39.4 | ..... | ..... | ..... | ..... | ..... |
| $11^h51^m$ | 418 | −18.0 | 14.32 | 13.35 | 30.9 | 43.9 | ..... | ..... | ..... | ..... | ..... |
| | 419 | −15.5 | 14.01 | 13.04 | 34.6 | 47.3 | ..... | ..... | ..... | ..... | ..... |
| | 420 | −21.5 | 13.91 | 12.94 | 26.5 | 39.1 | ..... | ..... | ..... | ..... | ..... |
| | 421 | 6.2 | 14.63 | 13.66 | 27.0 | 40.3 | ..... | ..... | ..... | ..... | ..... |
| | 422 | 19.1 | 13.98 | 13.01 | −15.7 | − 3.2 | ..... | 24.7 | ..... | ..... | ..... |
| | 423 | 15.4 | 14.03 | 13.06 | −19.0 | − 5.8 | ..... | 21.3 | 32.3 | ..... | ..... |
| | 424 | 19.0 | 14.12 | 13.15 | −10.9 | 1.9 | ..... | ..... | ..... | ..... | ..... |
| | 425 | 15.0 | 14.01 | 13.04 | − 4.2 | 8.5 | ..... | ..... | ..... | ..... | ..... |
| | 426 | 26.9 | 13.40 | 12.43 | 4.1 | 16.2 | ..... | ..... | ..... | ..... | ..... |
| | 427 | 18.9 | 13.78 | 12.81 | −23.8 | −11.8 | ..... | 15.1 | 25.8 | 38°9 | ..... |
| | 428 | 22.0 | 13.56 | 12.59 | −25.1 | −12.9 | ..... | 13.0 | 23.3 | 37.0 | ..... |
| | 429 | 20.2 | 13.50 | 12.53 | −29.9 | −17.7 | ..... | ..... | ..... | ..... | ..... |
| | 430 | 18.4 | 13.63 | 12.66 | −27.0 | −15.3 | ..... | 11.4 | 22.0 | 34.9 | ..... |
| | 431 | 23.5 | 13.40 | 12.43 | −31.6 | −19.5 | ..... | ..... | ..... | ..... | ..... |
| | 432 | 21.5 | 14.01 | 13.04 | −32.5 | −19.8 | ..... | ..... | ..... | ..... | ..... |
| | 433 | 18.1 | 13.71 | 12.74 | −35.1 | −22.7 | ..... | ..... | ..... | ..... | ..... |
| | 434 | 17.3 | 13.91 | 12.94 | −40.4 | −27.8 | ..... | ..... | ..... | ..... | ..... |
| | 435 | 22.9 | 12.88 | 11.91 | −44.8 | −33.2 | ..... | ..... | ..... | ..... | ..... |
| 917 | 436 | −22.5 | 14.17 | 13.20 | −39.5 | ..... | −12.1 | − 1.3 | 12.0 | 25.5 | ..... |
| Apr. 30, '04 | | | | | | | | | | | |
| $11^h13^m$ | | | | | | | | | | | |

TABLE I—*Continued*

| Plate Number and Date | Number | Latitude | Diurnal Motion | | Longitudes on Days of Observation | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sidereal | Synodic | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 919 | 437 | 22°0 | 14°14 | 13°18 | 25°6 | 36°0 | ..... | ..... | ..... | ..... | ..... |
| May 2, '04 | 438 | 25.2 | 14.40 | 13.44 | 25.1 | 35.7 | ..... | ..... | ..... | ..... | ..... |
| $2^h26^m$ | 439 | 14.2 | 13.13 | 12.17 | 20.4 | 30.0 | ..... | ..... | ..... | ..... | ..... |
| | 440 | 21.0 | 14.90 | 13.94 | 6.9 | 17.9 | ..... | ..... | ..... | ..... | ..... |
| | 441 | 24.5 | 13.76 | 12.80 | 5.7 | 15.8 | ..... | ..... | ..... | ..... | ..... |
| | 442 | 16.2 | 14.02 | 13.06 | 2.6 | 12.9 | ..... | ..... | ..... | ..... | ..... |
| | 443 | 17.6 | 13.92 | 12.96 | − 2.3 | 8.2 | 21°1 | 34°0 | ..... | ..... | ..... |
| | 444 | 20.6 | 14.08 | 13.12 | 0.0 | 10.9 | 22.8 | 37.1 | ..... | ..... | ..... |
| | 445 | 21.0 | 14.40 | 13.44 | − 1.4 | 9.2 | ..... | ..... | ..... | ..... | ..... |
| | 446 | 21.5 | 14.65 | 13.69 | − 2.7 | 8.1 | ..... | ..... | ..... | ..... | ..... |
| | 447 | 23.4 | 14.78 | 13.82 | − 2.1 | 8.8 | ..... | ..... | ..... | ..... | ..... |
| | 448 | 13.9 | 14.90 | 13.94 | −11.0 | 0.0 | ..... | ..... | ..... | ..... | ..... |
| | 449 | 16.2 | 15.16 | 14.20 | −11.3 | − 0.1 | ..... | ..... | ..... | ..... | ..... |
| | 450 | 17.8 | 15.16 | 14.20 | −14.1 | − 2.9 | ..... | ..... | ..... | ..... | ..... |
| | 451 | 27.2 | 14.90 | 13.94 | −14.9 | − 3.9 | 10.8 | 24.6 | ..... | ..... | ..... |
| | 453 | 24.3 | 15.03 | 14.07 | −20.0 | − 8.9 | ..... | ..... | ..... | ..... | ..... |
| | 454 | 21.5 | 14.78 | 13.82 | −19.9 | − 9.0 | ..... | ..... | ..... | ..... | ..... |
| | 455 | 20.2 | 14.52 | 13.56 | −20.6 | − 9.9 | ..... | ..... | ..... | ..... | ..... |
| | 456 | 19.3 | 15.28 | 14.32 | −26.4 | −15.1 | ..... | ..... | ..... | ..... | ..... |
| | 457 | 18.3 | 15.54 | 14.58 | −26.6 | −15.1 | ..... | ..... | ..... | ..... | ..... |
| | 458 | 20.0 | 14.43 | 13.47 | −31.1 | −20.5 | − 6.8 | 6.5 | ..... | ..... | ..... |
| | 459 | −24.8 | 14.14 | 13.18 | − 7.4 | 3.0 | ..... | ..... | ..... | ..... | ..... |
| | 460 | −26.6 | 13.32 | 12.36 | − 8.8 | 1.0 | 13.0 | 25.9 | ..... | ..... | ..... |
| | 461 | −22.3 | 13.80 | 12.84 | −20.0 | −10.2 | 2.6 | 15.9 | ..... | ..... | ..... |
| | 462 | −20.5 | 14.01 | 13.05 | −20.5 | −11.0 | 2.2 | 15.9 | ..... | ..... | ..... |
| | 463 | −17.9 | 14.50 | 13.54 | −30.1 | −19.3 | − 6.1 | 7.9 | ..... | ..... | ..... |
| | 464 | 26.3 | 14.52 | 13.56 | −25.1 | −14.4 | ..... | ..... | ..... | ..... | ..... |
| 923 | 465 | −19.4 | 14.55 | 13.59 | −19.7 | − 6.2 | ..... | ..... | ..... | ..... | ..... |
| May 3, '04 | 466 | −20.2 | 14.69 | 13.73 | −14.3 | − 0.3 | 13.3 | ..... | ..... | ..... | ..... |
| $9^h22^m$ | 467 | −25.3 | 14.65 | 13.69 | −14.5 | − 0.9 | ..... | ..... | ..... | ..... | ..... |
| | 468 | −23.3 | 14.84 | 13.88 | −16.0 | − 2.2 | 11.9 | ..... | ..... | ..... | ..... |
| | 469 | −23.6 | 14.09 | 13.13 | −17.3 | − 4.4 | 9.1 | ..... | ..... | ..... | ..... |
| | 470 | −23.4 | 14.55 | 13.59 | − 3.3 | 10.2 | ..... | ..... | ..... | ..... | ..... |
| | 471 | −22.9 | 14.65 | 13.69 | − 5.7 | 7.9 | ..... | ..... | ..... | ..... | ..... |
| | 472 | −25.3 | 13.84 | 12.88 | − 5.8 | 7.3 | 20.1 | ..... | ..... | ..... | ..... |
| | 473 | 14.3 | 14.69 | 13.73 | 10.5 | 24.2 | 38.1 | ..... | ..... | ..... | ..... |
| | 474 | −17.0 | 14.15 | 13.19 | −33.3 | −20.2 | ..... | ..... | ..... | ..... | ..... |
| | 475 | 36.0 | 13.55 | 12.59 | − 2.7 | 9.3 | 22.6 | ..... | ..... | ..... | ..... |
| | 476 | 23.2 | 14.15 | 13.19 | − 4.9 | 8.2 | ..... | ..... | ..... | ..... | ..... |
| | 477 | −18.4 | 14.55 | 13.59 | 36.3 | 49.8 | ..... | ..... | ..... | ..... | ..... |
| | 478 | −24.5 | 14.05 | 13.09 | 20.0 | 33.0 | ..... | ..... | ..... | ..... | ..... |
| | 479 | −16.1 | 13.95 | 12.99 | 25.9 | 38.8 | ..... | ..... | ..... | ..... | ..... |
| | 480 | 38.8 | 12.74 | 11.78 | −12.9 | − 1.2 | ..... | ..... | ..... | ..... | ..... |
| | 481 | 40.1 | 11.33 | 10.37 | −16.0 | − 5.7 | ..... | ..... | ..... | ..... | ..... |
| | 482 | 12.2 | 14.44 | 13.48 | 14.7 | 28.1 | 41.8 | ..... | ..... | ..... | ..... |
| | 483 | 10.4 | 14.86 | 13.90 | 13.1 | 26.9 | ..... | ..... | ..... | ..... | ..... |
| | 484 | 9.3 | 14.05 | 13.09 | 4.3 | 17.3 | ..... | ..... | ..... | ..... | ..... |
| | 486 | −12.3 | 14.39 | 13.43 | 13.6 | 27.0 | 40.6 | ..... | ..... | ..... | ..... |
| | 488 | 19.2 | 14.65 | 13.69 | 16.5 | 30.1 | ..... | ..... | ..... | ..... | ..... |
| | 489 | 18.9 | 14.45 | 13.49 | 15.2 | 28.6 | ..... | ..... | ..... | ..... | ..... |
| 928 | 490 | 23.2 | 14.13 | 13.17 | 25.7 | 39.1 | ..... | ..... | ..... | ..... | ..... |
| May 4, '04 | 491 | 20.8 | 14.13 | 13.17 | 25.8 | 39.2 | ..... | ..... | ..... | ..... | ..... |
| $9^h12^m$ | 492 | 17.2 | 14.32 | 13.36 | 13.3 | 26.9 | ..... | ..... | ..... | ..... | ..... |
| | 493 | 18.3 | 14.62 | 13.66 | 12.4 | 26.3 | ..... | ..... | ..... | ..... | ..... |
| | 494 | 18.1 | 14.43 | 13.47 | 10.7 | 24.4 | ..... | ..... | ..... | ..... | ..... |
| | 495 | 16.2 | 14.82 | 13.86 | 10.3 | 24.4 | ..... | ..... | ..... | ..... | ..... |
| | 496 | 20.4 | 15.02 | 14.06 | 8.1 | 22.4 | ..... | ..... | ..... | ..... | ..... |
| | 497 | 17.1 | 14.32 | 13.36 | 6.7 | 20.3 | ..... | ..... | ..... | ..... | ..... |
| | 498 | 20.6 | 14.13 | 13.17 | 4.8 | 18.2 | ..... | ..... | ..... | ..... | ..... |
| | 499 | 18.5 | 14.72 | 13.76 | 3.1 | 17.1 | ..... | ..... | ..... | ..... | ..... |
| | 500 | 21.2 | 13.64 | 12.68 | 3.2 | 16.1 | ..... | ..... | ..... | ..... | ..... |
| | 501 | −24.8 | 14.52 | 13.56 | 17.3 | 31.1 | ..... | ..... | ..... | ..... | ..... |
| | 502 | −21.2 | 14.43 | 13.47 | −42.6 | −28.9 | ..... | ..... | ..... | ..... | ..... |
| 932 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| May 5, '04 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| $9^h37^m$ | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |

TABLE I—*Continued*

| Plate Number and Date | Number | Latitude | Diurnal Motion | | Longitudes on Days of Observation | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sidereal | Synodic | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 946 | 503 | 20°.1 | 14°.73 | 13°.77 | 33°.2 | 46°.2 | ..... | ..... | ..... | ..... | ..... |
| May 20, '04 | 504 | 15.4 | 14.95 | 13.99 | 31.8 | 45.0 | ..... | ..... | ..... | ..... | ..... |
| 11h13m | 505 | 16.0 | 15.16 | 14.20 | 29.3 | 42.7 | ..... | ..... | ..... | ..... | ..... |
| | 506 | 12.4 | 14.73 | 13.77 | 27.7 | 40.7 | ..... | ..... | ..... | ..... | ..... |
| | 507 | 15.1 | 14.42 | 13.46 | 26.7 | 39.4 | ..... | ..... | ..... | ..... | ..... |
| | 508 | 22.6 | 14.31 | 13.35 | 23.5 | 36.1 | ..... | ..... | ..... | ..... | ..... |
| | 509 | 25.9 | 14.20 | 13.24 | 22.2 | 34.7 | ..... | ..... | ..... | ..... | ..... |
| | 510 | 16.3 | 14.20 | 13.24 | −24.6 | −12.1 | ..... | ..... | ..... | ..... | ..... |
| | 511 | 12.0 | 14.84 | 13.88 | −32.4 | −19.3 | ..... | ..... | ..... | ..... | ..... |
| | 512 | 18.0 | 14.52 | 13.56 | −39.5 | −26.7 | ..... | ..... | ..... | ..... | ..... |
| | 513 | 14.8 | 14.31 | 13.35 | −42.1 | −29.5 | ..... | ..... | ..... | ..... | ..... |
| | 514 | 17.8 | 13.89 | 12.93 | −34.7 | −22.5 | ..... | ..... | ..... | ..... | ..... |
| | 515 | 14.5 | 14.31 | 13.35 | −33.1 | −20.5 | ..... | ..... | ..... | ..... | ..... |
| | 516 | 12.1 | 14.84 | 13.88 | −45.9 | −32.8 | ..... | ..... | ..... | ..... | ..... |
| | 517 | 13.7 | 14.10 | 13.14 | −40.0 | −27.6 | ..... | ..... | ..... | ..... | ..... |
| | 518 | 11.5 | 14.84 | 13.88 | −27.8 | −14.7 | ..... | ..... | ..... | ..... | ..... |
| | 519 | 36.9 | 13.57 | 12.61 | −30.9 | −19.0 | ..... | ..... | ..... | ..... | ..... |
| | 520 | −23.5 | 14.20 | 13.24 | −32.0 | −19.5 | ..... | ..... | ..... | ..... | ..... |
| | 521 | −16.1 | 14.63 | 13.67 | −37.0 | −24.1 | ..... | ..... | ..... | ..... | ..... |
| | 522 | −14.0 | 14.42 | 13.46 | −38.0 | −25.3 | ..... | ..... | ..... | ..... | ..... |
| | 523 | −14.6 | 14.84 | 13.88 | −41.0 | −27.9 | ..... | ..... | ..... | ..... | ..... |
| | 524 | −12.5 | 14.84 | 13.88 | −43.0 | −29.9 | ..... | ..... | ..... | ..... | ..... |
| | 525 | −13.4 | 14.31 | 13.35 | − 4.2 | 8.4 | ..... | ..... | ..... | ..... | ..... |
| | 526 | 18.9 | 13.77 | 12.81 | 0.8 | 12.9 | ..... | ..... | ..... | ..... | ..... |
| | 527 | −18.1 | 14.42 | 13.46 | − 7.6 | 5.1 | ..... | ..... | ..... | ..... | ..... |
| | 528 | −21.3 | 13.99 | 13.03 | −10.3 | 2.0 | ..... | ..... | ..... | ..... | ..... |
| 951 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| May 21, '04 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 9h52m | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 962 | 529 | 9.7 | 14.55 | 13.60 | 9.8 | 22.5 | ..... | ..... | ..... | ..... | ..... |
| May 31, '04 | 530 | 6.2 | 14.87 | 13.92 | 7.5 | 20.5 | ..... | ..... | ..... | ..... | ..... |
| 11h56m | 531 | 6.0 | 14.44 | 13.49 | 4.7 | 17.3 | ..... | ..... | ..... | ..... | ..... |
| | 532 | 3.5 | 15.19 | 14.24 | − 0.9 | 12.4 | ..... | ..... | ..... | ..... | ..... |
| | 533 | 6.2 | 15.08 | 14.13 | − 1.1 | 12.1 | ..... | ..... | ..... | ..... | ..... |
| | 534 | 7.5 | 14.44 | 13.49 | − 5.2 | 7.4 | ..... | ..... | ..... | ..... | ..... |
| | 535 | 15.3 | 15.19 | 14.24 | 8.6 | 21.9 | ..... | ..... | ..... | ..... | ..... |
| | 536 | 17.9 | 14.55 | 13.60 | 7.7 | 20.4 | ..... | ..... | ..... | ..... | ..... |
| | 537 | 13.9 | 14.01 | 13.06 | 11.1 | 23.3 | ..... | ..... | ..... | ..... | ..... |
| | 538 | 14.0 | 14.23 | 13.28 | 24.7 | 37.1 | ..... | ..... | ..... | ..... | ..... |
| | 539 | 17.6 | 14.01 | 13.06 | 29.1 | 42.3 | ..... | ..... | ..... | ..... | ..... |
| | 540 | 22.0 | 14.01 | 13.06 | 30.4 | 42.6 | ..... | ..... | ..... | ..... | ..... |
| | 541 | 23.0 | 13.80 | 12.85 | 13.6 | 25.6 | ..... | ..... | ..... | ..... | ..... |
| | 542 | 23.5 | 14.65 | 13.70 | − 1.9 | 10.9 | ..... | ..... | ..... | ..... | ..... |
| | 543 | 26.9 | 13.16 | 12.21 | −15.2 | − 3.8 | ..... | ..... | ..... | ..... | ..... |
| | 544 | 19.7 | 14.01 | 13.06 | −38.9 | −26.7 | ..... | ..... | ..... | ..... | ..... |
| | 545 | −18.9 | 14.55 | 13.60 | 0.0 | 12.7 | ..... | ..... | ..... | ..... | ..... |
| | 546 | −35.4 | 14.12 | 13.17 | 2.4 | 14.7 | ..... | ..... | ..... | ..... | ..... |
| | 547 | −24.1 | 13.90 | 12.95 | − 8.9 | 3.2 | ..... | ..... | ..... | ..... | ..... |
| | 548 | −22.7 | 13.80 | 12.85 | −10.2 | 1.8 | ..... | ..... | ..... | ..... | ..... |
| | 549 | −30.5 | 13.69 | 12.74 | −13.8 | − 1.9 | ..... | ..... | ..... | ..... | ..... |
| | 550 | −30.1 | 13.69 | 12.74 | −18.1 | − 6.2 | ..... | ..... | ..... | ..... | ..... |
| | 551 | −23.1 | 14.33 | 13.38 | −20.0 | − 7.5 | ..... | ..... | ..... | ..... | ..... |
| | 552 | −22.8 | 13.90 | 12.95 | −22.1 | −10.0 | ..... | ..... | ..... | ..... | ..... |
| | 553 | −17.8 | 15.30 | 14.35 | −25.2 | −11.8 | ..... | ..... | ..... | ..... | ..... |
| | 554 | −19.5 | 14.33 | 13.38 | −25.2 | −12.7 | ..... | ..... | ..... | ..... | ..... |
| | 555 | −19.9 | 14.87 | 13.92 | −30.7 | −17.7 | ..... | ..... | ..... | ..... | ..... |
| | 556 | −22.8 | 14.87 | 13.92 | −30.9 | −17.9 | ..... | ..... | ..... | ..... | ..... |
| | 557 | −23.6 | 14.65 | 13.70 | −33.1 | −20.3 | ..... | ..... | ..... | ..... | ..... |
| | 558 | −25.2 | 14.44 | 13.49 | −34.3 | −21.7 | ..... | ..... | ..... | ..... | ..... |
| | 559 | −29.9 | 14.44 | 13.49 | −35.7 | −23.1 | ..... | ..... | ..... | ..... | ..... |
| | 560 | −26.1 | 14.01 | 13.06 | −37.9 | −25.7 | ..... | ..... | ..... | ..... | ..... |
| | 561 | −23.1 | 14.98 | 14.03 | −35.9 | −22.8 | ..... | ..... | ..... | ..... | ..... |
| | 562 | −15.0 | 14.01 | 13.06 | 10.9 | 23.1 | ..... | ..... | ..... | ..... | ..... |
| | 563 | −21.1 | 13.48 | 12.53 | 2.1 | 13.8 | ..... | ..... | ..... | ..... | ..... |
| | 564 | −22.5 | 13.90 | 12.95 | − 6.0 | 6.1 | ..... | ..... | ..... | ..... | ..... |
| | 565 | −18.4 | 14.12 | 13.17 | − 8.9 | 3.4 | ..... | ..... | ..... | ..... | ..... |

TABLE I—*Continued*

| Plate Number and Date | Number | Latitude | Diurnal Motion | | Longitudes on Days of Observation | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sidereal | Synodic | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 962 (*cont.*) | 566 | −21°0 | 14°01 | 13°06 | −12°0 | 0°2 | ..... | ..... | ..... | ..... | ..... |
| | 567 | −27.6 | 14.55 | 13.60 | −17.9 | − 5.2 | ..... | ..... | ..... | ..... | ..... |
| | 568 | −16.0 | 14.01 | 13.06 | −11.5 | 0.7 | ..... | ..... | ..... | ..... | ..... |
| | 569 | −18.4 | 14.87 | 13.92 | −17.0 | − 4.0 | ..... | ..... | ..... | ..... | ..... |
| | 570 | −20.5 | 14.44 | 13.49 | −15.8 | − 3.2 | ..... | ..... | ..... | ..... | ..... |
| | 571 | −17.0 | 14.87 | 13.92 | −17.1 | − 4.1 | ..... | ..... | ..... | ..... | ..... |
| | 572 | −10.0 | 14.01 | 13.06 | −25.0 | −12.8 | ..... | ..... | ..... | ..... | ..... |
| | 573 | − 4.8 | 14.33 | 13.38 | −24.3 | −11.8 | ..... | ..... | ..... | ..... | ..... |
| | 574 | 21.1 | 13.69 | 12.74 | −40.0 | −28.1 | ..... | ..... | ..... | ..... | ..... |
| | 575 | 23.6 | 13.37 | 12.42 | −39.2 | −27.6 | ..... | ..... | ..... | ..... | ..... |
| 967 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| June 1, '04 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 10h21m | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 972 | 576 | −23.0 | 14.47 | 13.52 | 32.1 | 44.8 | ..... | ..... | ..... | ..... | ..... |
| June 8, '04 | 577 | −19.2 | 13.62 | 12.67 | 30.4 | 42.3 | ..... | ..... | ..... | ..... | ..... |
| 11h14m | 578 | −16.2 | 14.25 | 13.30 | 26.4 | 38.9 | ..... | ..... | ..... | ..... | ..... |
| | 579 | − 5.5 | 15.11 | 14.16 | 25.2 | 38.5 | ..... | ..... | ..... | ..... | ..... |
| | 580 | − 7.3 | 14.79 | 13.84 | 14.8 | 27.8 | ..... | ..... | ..... | ..... | ..... |
| | 581 | 0.8 | 15.53 | 14.58 | 5.3 | 19.0 | ..... | ..... | ..... | ..... | ..... |
| | 582 | − 9.5 | 14.15 | 13.20 | − 0.4 | 12.0 | ..... | ..... | ..... | ..... | ..... |
| | 583 | −15.8 | 14.32 | 13.37 | 0.7 | 13.1 | 27°2 | 39°4 | ..... | ..... | ..... |
| | 584 | −19.0 | 13.83 | 12.88 | − 0.3 | 11.8 | ..... | ..... | ..... | ..... | ..... |
| | 585 | −10.0 | 14.68 | 13.73 | 28.6 | 41.5 | ..... | ..... | ..... | ..... | ..... |
| | 586 | −24.9 | 14.04 | 13.09 | 9.4 | 21.7 | ..... | ..... | ..... | ..... | ..... |
| | 587 | −30.0 | 14.38 | 13.43 | 8.3 | 21.1 | 35.0 | ..... | ..... | ..... | ..... |
| | 588 | −22.2 | 13.57 | 12.62 | − 4.0 | 8.0 | 21.1 | ..... | ..... | ..... | ..... |
| | 589 | −14.7 | 14.79 | 13.84 | − 9.3 | 3.7 | ..... | ..... | ..... | ..... | ..... |
| | 590 | −19.0 | 13.83 | 12.88 | −10.0 | 2.1 | ..... | ..... | ..... | ..... | ..... |
| | 591 | −22.5 | 13.73 | 12.78 | − 8.1 | 3.5 | 17.3 | ..... | ..... | ..... | ..... |
| | 592 | −30.4 | 13.16 | 12.21 | − 4.0 | 6.4 | 20.0 | 31.1 | ..... | ..... | ..... |
| | 593 | −36.9 | 14.36 | 13.41 | − 5.7 | 6.9 | ..... | ..... | ..... | ..... | ..... |
| | 594 | −14.9 | 14.68 | 13.73 | −13.9 | − 1.0 | ..... | ..... | ..... | ..... | ..... |
| | 595 | −20.4 | 13.88 | 12.93 | −20.1 | − 8.2 | 5.6 | ..... | ..... | ..... | ..... |
| | 596 | −39.8 | 12.77 | 11.81 | −12.9 | − 1.8 | 14.3 | ..... | ..... | ..... | ..... |
| | 597 | 9.1 | 15.64 | 14.69 | − 8.0 | 5.8 | ..... | ..... | ..... | ..... | ..... |
| | 598 | 11.4 | 13.19 | 12.24 | − 6.7 | 4.8 | ..... | ..... | ..... | ..... | ..... |
| | 599 | 9.8 | 14.21 | 13.26 | −11.2 | 1.2 | 15.4 | 27.1 | ..... | ..... | ..... |
| | 600 | 15.5 | 14.46 | 13.51 | − 5.8 | 6.9 | 20.9 | 33.4 | ..... | ..... | ..... |
| | 601 | 19.0 | 14.15 | 13.20 | −27.3 | −14.9 | ..... | ..... | ..... | ..... | ..... |
| | 602 | 17.6 | 14.15 | 13.20 | −28.9 | −16.5 | ..... | ..... | ..... | ..... | ..... |
| | 603 | 16.0 | 14.15 | 13.20 | −30.2 | −17.8 | ..... | ..... | ..... | ..... | ..... |
| | 604 | 15.5 | 13.72 | 12.77 | −32.0 | −20.0 | ..... | ..... | ..... | ..... | ..... |
| | 605 | 19.7 | 12.66 | 11.71 | −32.4 | −21.4 | ..... | ..... | ..... | ..... | ..... |
| | 606 | 20.8 | 13.83 | 12.88 | −23.1 | −11.0 | ..... | ..... | ..... | ..... | ..... |
| | 607 | 21.7 | 14.23 | 13.28 | −18.7 | − 6.2 | 7.5 | 19.7 | ..... | 47°1 | ..... |
| | 608 | 18.3 | 14.43 | 13.48 | 8.2 | 20.9 | 35.0 | ..... | ..... | ..... | ..... |
| | 609 | 15.2 | 13.93 | 12.98 | 12.5 | 24.7 | ..... | ..... | ..... | ..... | ..... |
| | 611 | 20.9 | 14.04 | 13.09 | 29.1 | 41.4 | ..... | ..... | ..... | ..... | ..... |
| | 612 | 23.2 | 14.15 | 13.20 | 30.8 | 43.3 | ..... | ..... | ..... | ..... | ..... |
| | 613 | 18.2 | 13.30 | 12.35 | 31.8 | 43.4 | ..... | ..... | ..... | ..... | ..... |
| | 614 | 27.8 | 12.87 | 11.92 | 10.9 | 22.1 | ..... | ..... | ..... | ..... | ..... |
| | 615 | −21.2 | 14.57 | 13.62 | 10.3 | 23.1 | ..... | ..... | ..... | ..... | ..... |
| | 616 | −32.7 | 13.40 | 12.45 | − 0.1 | 11.6 | ..... | ..... | ..... | ..... | ..... |
| | 617 | 33.5 | 14.57 | 13.62 | 24.2 | 37.0 | ..... | ..... | ..... | ..... | ..... |
| 976 | 618 | −18.3 | 13.35 | 12.40 | 24.2 | 37.2 | ..... | ..... | ..... | ..... | ..... |
| June 9, '04 | 619 | −17.9 | 13.35 | 12.40 | 25.5 | 38.5 | ..... | ..... | ..... | ..... | ..... |
| 9h47m | 621 | −23.1 | 13.77 | 12.82 | 16.2 | 29.6 | 41.3 | ..... | ..... | ..... | ..... |
| | 622 | 14.9 | 14.59 | 13.64 | − 5.1 | 9.1 | 21.6 | ..... | ..... | ..... | ..... |
| | 623 | 26.3 | 14.67 | 13.72 | 13.2 | 26.8 | 40.1 | ..... | ..... | ..... | ..... |
| | 624 | 24.4 | 13.54 | 12.59 | 18.8 | 32.0 | ..... | ..... | ..... | ..... | ..... |
| | 625 | 21.7 | 14.03 | 13.08 | 19.9 | 33.7 | 45.5 | | | | |
| | 626 | 8.3 | 14.94 | 13.99 | − 8.1 | 6.2 | 19.3 | ..... | ..... | ..... | ..... |
| | 627 | 8.7 | 14.78 | 13.83 | −13.4 | 1.1 | ..... | ..... | ..... | ..... | ..... |
| | 628 | 6.1 | 14.55 | 13.60 | 1.5 | 16.1 | 28.1 | ..... | ..... | ..... | ..... |
| | 629 | −19.0 | 14.20 | 13.25 | 6.0 | 19.9 | ..... | ..... | ..... | ..... | ..... |

TABLE I—*Continued*

| Plate Number and Date | Number | Latitude | Diurnal Motion | | Longitudes on Days of Observation | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sidereal | Synodic | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 976 (*cont.*) | 630 | −16°8 | 13°78 | 12°83 | −40°1 | −26°0 | −14°7 | ..... | 11°8 | 24°6 | ..... |
| | 631 | −17.2 | 14.49 | 13.54 | −42.7 | −28.5 | ..... | ..... | ..... | ..... | ..... |
| | 632 | −16.3 | 14.12 | 13.16 | −44.1 | −30.3 | ..... | ..... | ..... | ..... | ..... |
| | 633 | −23.5 | 14.20 | 13.25 | −19.3 | − 5.4 | ..... | ..... | ..... | ..... | ..... |
| | 634 | −22.9 | 13.72 | 12.77 | −21.5 | − 8.1 | ..... | ..... | ..... | ..... | ..... |
| | 635 | −22.2 | 14.49 | 13.54 | −24.3 | −10.1 | ..... | ..... | ..... | ..... | ..... |
| | 636 | −25.6 | 13.82 | 12.87 | −27.9 | −14.4 | ..... | ..... | ..... | ..... | ..... |
| 982 | 637 | 16.6 | 14.28 | 13.33 | 1.2 | 14.0 | ..... | 40°9 | ..... | ..... | ..... |
| June 10, '04 | 638 | 13.2 | 14.04 | 13.09 | 14.3 | 26.2 | ..... | ..... | ..... | ..... | ..... |
| $10^h57^m$ | 639 | 14.8 | 14.81 | 13.86 | 19.0 | 31.6 | ..... | ..... | ..... | ..... | ..... |
| | 640 | − 2.8 | 14.37 | 13.42 | 8.2 | 20.4 | ..... | ..... | ..... | ..... | ..... |
| | 641 | 15.6 | 14.15 | 13.20 | − 6.0 | 6.0 | ..... | ..... | ..... | ..... | ..... |
| | 642 | 16.8 | 14.26 | 13.31 | −10.2 | 1.9 | ..... | ..... | ..... | ..... | ..... |
| | 643 | 24.2 | 14.26 | 13.31 | 3.1 | 15.2 | ..... | ..... | ..... | ..... | ..... |
| | 644 | −27.9 | 13.71 | 12.76 | 31.5 | 43.1 | ..... | ..... | ..... | ..... | ..... |
| | 645 | −28.7 | 13.93 | 12.98 | 26.1 | 37.9 | ..... | ..... | ..... | ..... | ..... |
| | 646 | −29.5 | 13.71 | 12.76 | 23.7 | 35.3 | ..... | ..... | ..... | ..... | ..... |
| | 647 | 27.0 | 13.34 | 12.39 | − 9.5 | 2.0 | ..... | 27.3 | ..... | ..... | ..... |
| 989 | 648 | 11.6 | 14.42 | 13.47 | 21.2 | ..... | 48.9 | ..... | ..... | ..... | ..... |
| June 11, '04 | 649 | 11.8 | 14.91 | 13.96 | −20.1 | ..... | 8.6 | ..... | ..... | ..... | ..... |
| $8^h46^m$ | | | | | | | | | | | |
| 994 | 650 | 17.4 | 13.94 | 12.99 | 8.7 | 21.9 | ..... | ..... | ..... | ..... | ..... |
| June 13, '04 | 651 | 21.5 | 14.63 | 13.68 | 8.0 | 21.9 | ..... | ..... | ..... | ..... | ..... |
| $10^h07^m$ | 652 | 25.5 | 14.34 | 13.39 | 8.4 | 22.0 | ..... | ..... | ..... | ..... | ..... |
| | 653 | 24.6 | 13.94 | 12.99 | 6.4 | 19.6 | ..... | ..... | ..... | ..... | ..... |
| | 654 | 29.4 | 13.84 | 12.89 | 6.0 | 19.1 | ..... | ..... | ..... | ..... | ..... |
| | 655 | 27.9 | 13.74 | 12.79 | 1.9 | 14.9 | ..... | ..... | ..... | ..... | ..... |
| | 656 | 28.6 | 14.53 | 13.58 | 10.0 | 23.8 | ..... | ..... | ..... | ..... | ..... |
| | 657 | 30.1 | 13.94 | 12.99 | − 0.8 | 12.4 | ..... | ..... | ..... | ..... | ..... |
| | 658 | 19.8 | 14.53 | 13.58 | 37.1 | 50.9 | ..... | ..... | ..... | ..... | ..... |
| 1004 | 660 | 6.7 | 14.58 | 13.63 | − 3.9 | ..... | 22.9 | ..... | ..... | ..... | ..... |
| June 14, '04 | 661 | 10.7 | 14.43 | 13.48 | − 3.8 | ..... | 22.7 | ..... | ..... | ..... | ..... |
| $10^h30^m$ | 662 | 11.8 | 14.38 | 13.43 | − 1.0 | ..... | 25.4 | ..... | ..... | ..... | ..... |
| | 663 | 18.1 | 14.64 | 13.69 | − 1.8 | ..... | 20.1 | ..... | ..... | ..... | ..... |
| | 664 | 22.6 | 14.17 | 13.22 | − 1.7 | ..... | 24.3 | ..... | ..... | ..... | ..... |
| | 665 | 14.2 | 14.64 | 13.69 | 7.0 | ..... | 33.9 | ..... | ..... | ..... | ..... |
| 1007 | 666 | 9.5 | 14.45 | 13.50 | −29.2 | −15.6 | − 2.4 | ..... | ..... | ..... | ..... |
| June 16, '04 | 667 | 7.0 | 14.20 | 13.25 | −32.5 | −18.7 | − 6.2 | ..... | ..... | ..... | ..... |
| $9^h41^m$ | 668 | 8.5 | 14.36 | 13.41 | −37.5 | −23.2 | −10.9 | ..... | ..... | ..... | ..... |
| | 669 | 10.2 | 14.10 | 13.15 | −37.1 | −23.1 | −11.5 | ..... | 15.6 | 28.9 | 41°9 |
| | 670 | 8.0 | 13.80 | 12.85 | −39.6 | −26.1 | ..... | ..... | ..... | ..... | ..... |
| | 671 | 9.1 | 13.90 | 12.95 | −40.0 | −26.5 | −14.3 | ..... | ..... | ..... | ..... |
| | 672 | 10.4 | 14.56 | 13.61 | −43.2 | −28.0 | −16.2 | ..... | ..... | ..... | ..... |
| | 673 | 12.3 | 14.18 | 13.23 | −44.4 | −30.5 | ..... | ..... | ..... | ..... | ..... |
| | 674 | 13.9 | 14.28 | 13.33 | −38.9 | −24.9 | ..... | ..... | ..... | ..... | ..... |
| | 675 | 16.1 | 14.18 | 13.23 | −39.0 | −25.5 | −13.1 | ..... | 14.1 | ..... | ..... |
| | 676 | 17.4 | 14.25 | 13.30 | −37.8 | −24.1 | −12.5 | ..... | 15.7 | ..... | ..... |
| | 677 | 17.3 | 14.15 | 13.20 | −40.7 | −26.9 | −14.5 | ..... | ..... | ..... | ..... |
| | 678 | 17.4 | 13.98 | 13.03 | −43.9 | −30.5 | −18.2 | ..... | 8.4 | ..... | ..... |
| | 679 | 17.8 | 14.00 | 13.05 | −46.4 | −33.0 | −20.8 | ..... | 6.0 | ..... | ..... |
| | 680 | −21.6 | 14.11 | 13.16 | −40.1 | −26.1 | −14.0 | ..... | ..... | ..... | ..... |
| | 681 | −18.4 | 14.37 | 13.42 | −42.3 | −28.2 | ..... | ..... | ..... | ..... | ..... |
| | 682 | −22.8 | 14.18 | 13.23 | −44.4 | 30.5 | ..... | ..... | ..... | ..... | ..... |
| | 683 | 14.1 | 14.85 | 13.90 | 25.5 | 40.1 | ..... | ..... | ..... | ..... | ..... |
| | 684 | 11.9 | 14.66 | 13.71 | 28.4 | 42.8 | ..... | ..... | ..... | ..... | ..... |
| 1013 | 686 | 12.5 | 14.24 | 13.29 | −10.4 | 2.0 | ..... | ..... | ..... | ..... | ..... |
| June 17, '04 | 687 | 16.7 | 14.13 | 13.18 | −15.9 | − 3.1 | ..... | 23.4 | 36.5 | ..... | ..... |
| $10^h54^m$ | 688 | 13.5 | 14.88 | 13.93 | −16.0 | − 3.0 | ..... | ..... | ..... | ..... | ..... |
| | 689 | 9.0 | 14.88 | 13.93 | −16.9 | − 3.9 | ..... | ..... | ..... | ..... | ..... |
| | 690 | 6.1 | 14.99 | 14.04 | −23.3 | −10.2 | ..... | ..... | ..... | ..... | ..... |
| | 691 | 18.0 | 13.97 | 13.02 | −40.2 | −28.7 | ..... | − 1.0 | 10.8 | ..... | ..... |
| | 692 | 16.3 | 13.91 | 12.96 | −42.5 | −30.4 | ..... | ..... | ..... | ..... | ..... |
| | 693 | −15.1 | 14.77 | 13.82 | −23.1 | −10.2 | ..... | ..... | ..... | ..... | ..... |

TABLE I—*Continued*

| Plate Number and Date | Number | Latitude | Diurnal Motion | | Longitudes on Days of Observation | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sidereal | Synodic | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1013 (*cont.*) | 694 | −12°0 | 14°42 | 13°47 | −24°0 | −11°9 | ..... | 15°9 | ..... | ..... | ..... |
| | 695 | −14.8 | 14.02 | 13.07 | −28.0 | −15.8 | ..... | ..... | ..... | ..... | ..... |
| | 696 | −12.0 | 14.66 | 13.71 | −27.8 | −15.0 | ..... | ..... | ..... | ..... | ..... |
| | 697 | −14.0 | 13.81 | 12.86 | −29.5 | −17.5 | ..... | ..... | ..... | ..... | ..... |
| | 698 | −10.9 | 14.66 | 13.71 | −29.8 | −17.0 | ..... | ..... | ..... | ..... | ..... |
| | 699 | −17.6 | 14.02 | 13.07 | −29.8 | −17.6 | ..... | ..... | ..... | ..... | ..... |
| | 700 | −19.6 | 13.27 | 12.32 | −33.8 | −22.3 | ..... | ..... | ..... | ..... | ..... |
| | 701 | −26.6 | 14.02 | 13.07 | −33.1 | −20.9 | ..... | ..... | ..... | ..... | ..... |
| | 702 | −18.8 | 14.02 | 13.07 | −37.9 | −25.7 | ..... | ..... | ..... | ..... | ..... |
| | 703 | −20.7 | 15.84 | 14.89 | −30.9 | −27.0 | ..... | ..... | ..... | ..... | ..... |
| | 704 | −11.2 | 14.02 | 13.07 | −42.2 | −30.0 | ..... | ..... | ..... | ..... | ..... |
| | 705 | −27.1 | 13.16 | 12.21 | −25.0 | −13.6 | ..... | ..... | ..... | ..... | ..... |
| | 707 | −13.5 | 13.70 | 12.75 | −39.5 | −27.6 | ..... | ..... | ..... | ..... | ..... |
| 1017 | 708 | 18.4 | 13.89 | 12.94 | −34.2 | ..... | − 7°3 | 5.2 | 17°9 | ..... | ..... |
| June 18, '04 | 709 | 17.5 | 14.39 | 13.44 | −39.3 | ..... | −11.2 | 1.8 | 15.0 | 28°5 | ..... |
| $9^h18^m$ | 710 | 8.8 | 14.48 | 13.53 | −20.7 | ..... | 6.2 | 20.0 | 33.8 | ..... | ..... |
| | 711 | 8.6 | 14.18 | 13.23 | −23.2 | ..... | 3.7 | 17°0 | 30.0 | ..... | ..... |
| | 712 | 6.0 | 14.17 | 13.22 | −21.9 | ..... | 5.2 | 18.1 | ..... | ..... | ..... |
| | 713 | 19.6 | 14.54 | 13.59 | −14.9 | ..... | 13.0 | 26.2 | 39.9 | ..... | ..... |
| 1025 | 714 | 15.9 | 13.86 | 12.91 | 10.6 | 23.0 | 36.3 | ..... | ..... | ..... | ..... |
| June 20, '04 | 715 | 10.1 | 14.47 | 13.52 | 11.3 | 24.2 | 38.2 | ..... | ..... | ..... | ..... |
| $10^h10^m$ | 716 | 19.5 | 14.34 | 13.39 | 20.7 | 34.0 | ..... | ..... | ..... | ..... | ..... |
| | 717 | −28.1 | 13.74 | 12.79 | 12.9 | 25.6 | ..... | ..... | ..... | ..... | ..... |
| | 718 | 14.5 | 13.76 | 12.81 | 18.9 | 31.2 | 44.4 | ..... | ..... | ..... | ..... |
| | 719 | 16.0 | 14.14 | 13.19 | 4.4 | 17.5 | ..... | ..... | ..... | ..... | ..... |
| | 720 | 14.4 | 14.34 | 13.39 | 21.3 | 34.6 | ..... | ..... | ..... | ..... | ..... |
| | 721 | 17.0 | 14.40 | 13.45 | 1.3 | 14.2 | 27.8 | 41.5 | ..... | ..... | ..... |
| | 722 | 18.3 | 14.31 | 13.36 | −15.1 | − 1.2 | 11.8 | 25.0 | ..... | ..... | ..... |
| | 723 | 17.5 | 14.24 | 13.29 | −17.1 | − 3.9 | ..... | ..... | ..... | ..... | ..... |
| | 724 | −19.2 | 14.54 | 13.59 | 10.0 | 23.5 | ..... | ..... | ..... | ..... | ..... |
| | 725 | −17.8 | 14.65 | 13.70 | 10.2 | 23.8 | ..... | ..... | ..... | ..... | ..... |
| | 726 | −19.4 | 14.57 | 13.62 | 7.9 | 21.2 | 35.0 | ..... | ..... | ..... | ..... |
| | 727 | −14.6 | 14.24 | 13.29 | 4.1 | 17.3 | ..... | ..... | ..... | ..... | ..... |
| | 728 | −15.8 | 13.94 | 12.99 | 0.0 | 12.9 | ..... | ..... | ..... | ..... | ..... |
| | 729 | −20.0 | 14.21 | 13.26 | 0.5 | 13.5 | 26.9 | ..... | ..... | ..... | ..... |
| | 730 | −23.6 | 13.36 | 12.41 | − 0.6 | 12.1 | 24.1 | ..... | ..... | ..... | ..... |
| | 731 | −20.7 | 14.22 | 13.27 | −27.7 | −14.1 | − 1.4 | 12.2 | ..... | ..... | ..... |
| | 732 | −20.8 | 14.49 | 13.54 | −29.9 | −16.1 | −·2.8 | 10.7 | ..... | ..... | ..... |
| | 733 | −15.9 | 13.84 | 12.89 | −31.0 | −18.2 | ..... | ..... | ..... | ..... | ..... |
| | 734 | − 5.1 | 14.47 | 13.52 | − 4.9 | 8.7 | 22.0 | ..... | ..... | ..... | ..... |
| 1030 | 735 | −17.8 | 14.89 | 13.94 | 27.1 | 41.0 | ..... | ..... | ..... | ..... | ..... |
| June 21, '04 | 736 | −16.8 | 13.89 | 12.94 | 25.6 | 38.5 | ..... | ..... | ..... | ..... | ..... |
| $10^h00^m$ | 737 | −13.5 | 14.39 | 13.44 | 21.1 | 34.5 | ..... | ..... | ..... | ..... | ..... |
| | 738 | −10.9 | 14.39 | 13.44 | 9.5 | 22.9 | ..... | ..... | ..... | ..... | ..... |
| | 739 | 18.8 | 14.09 | 13.14 | 20.9 | 34.0 | ..... | ..... | ..... | ..... | ..... |
| | 740 | 9.7 | 14.69 | 13.74 | 22.1 | 35.8 | ..... | ..... | ..... | ..... | ..... |
| | 741 | −22.9 | 14.50 | 13.55 | 18.2 | 32.1 | 45.3 | ..... | ..... | ..... | ..... |
| | 742 | −27.3 | 14.29 | 13.34 | 18.6 | 31.9 | ..... | ..... | ..... | ..... | ..... |
| | 743 | 14.6 | 14.29 | 13.34 | −37.9 | −24.6 | ..... | ..... | ..... | ..... | ..... |
| | 744 | 16.7 | 13.99 | 13.04 | −37.1 | −24.1 | ..... | ..... | ..... | ..... | ..... |
| | 745 | 22.7 | 14.29 | 13.34 | −40.1 | −26.8 | ..... | ..... | ..... | ..... | ..... |
| | 746 | 22.9 | 14.19 | 13.24 | −42.4 | −29.2 | ..... | ..... | ..... | ..... | ..... |
| | 747 | 25.6 | 14.79 | 13.84 | −44.9 | −31.1 | ..... | ..... | ..... | ..... | ..... |
| | 748 | 30.0 | 12.38 | 11.43 | −40.0 | −28.6 | ..... | ..... | ..... | ..... | ..... |
| | 749 | −23.1 | 13.79 | 12.84 | 15.3 | 28.1 | ..... | ..... | ..... | ..... | ..... |
| | 750 | −29.7 | 13.90 | 12.95 | 16.8 | 30.0 | 42.7 | ..... | ..... | ..... | ..... |
| | 751 | −28.0 | 13.70 | 12.75 | 11.7 | 24.1 | 37.2 | ..... | ..... | ..... | ..... |
| | 752 | 14.4 | 14.39 | 13.44 | 11.4 | 24.8 | ..... | ..... | ..... | ..... | ..... |
| | 753 | −28.9 | 14.46 | 13.51 | 3.0 | 16.2 | 30.0 | ..... | ..... | ..... | ..... |
| | 754 | −50.8 | 7.87 | 6.92 | 28.0 | 34.9 | ..... | ..... | ..... | ..... | ..... |
| | 755 | −45.5 | 9.78 | 8.83 | − 8.8 | 0.0 | ..... | ..... | ..... | ..... | ..... |
| 1035 | 756 | 19.3 | 14.01 | 13.06 | −23.6 | −10.5 | ..... | ..... | ..... | ..... | ..... |
| June 22, '04 | 758 | −19.9 | 14.01 | 13.06 | 12.8 | 25.9 | ..... | ..... | ..... | ..... | ..... |
| $9^h56^m$ | 759 | 20.6 | 14.71 | 13.76 | 24.2 | 38.0 | ..... | ..... | ..... | ..... | ..... |
| | 760 | 18.7 | 13.89 | 12.94 | 22.8 | 35.8 | ..... | ..... | ..... | ..... | ..... |

TABLE I—*Continued*

| Plate Number and Date | Number | Latitude | Diurnal Motion | | Longitudes on Days of Observation | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sidereal | Synodic | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1039 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| June 23, '04 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| $10^h00^m5$ | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 1051 | 761 | −24°0 | 13°93 | 12°98 | 28°3 | 41°2 | ..... | ..... | ..... | ..... | ..... |
| July 1, '04 | 762 | −23.1 | 13.63 | 12.68 | 31.7 | 44.3 | ..... | ..... | ..... | ..... | ..... |
| $9^h21^m$ | 763 | −19.7 | 14.43 | 13.48 | 32.0 | 45.4 | ..... | ..... | ..... | ..... | ..... |
| | 764 | −17.6 | 14.43 | 13.48 | − 5.5 | 7.9 | ..... | ..... | ..... | ..... | ..... |
| | 765 | −22.8 | 14.84 | 13.89 | 12.2 | 26.0 | ..... | ..... | ..... | ..... | ..... |
| | 766 | 27.7 | 13.73 | 12.78 | − 1.6 | 11.1 | ..... | ..... | ..... | ..... | ..... |
| | 767 | 22.4 | 14.23 | 13.28 | 27.1 | 40.3 | ..... | ..... | ..... | ..... | ..... |
| | 768 | 19.6 | 13.93 | 12.98 | − 4.7 | 8.2 | ..... | ..... | ..... | ..... | ..... |
| | 769 | 25.2 | 14.13 | 13.18 | −10.9 | 2.2 | ..... | ..... | ..... | ..... | ..... |
| | 770 | 16.8 | 13.93 | 12.98 | − 8.4 | 4.5 | ..... | ..... | ..... | ..... | ..... |
| | 771 | 14.2 | 13.93 | 12.98 | −14.6 | − 1.7 | ..... | ..... | ..... | ..... | ..... |
| | 772 | 13.5 | 14.74 | 13.79 | −20.7 | − 7.0 | ..... | ..... | ..... | ..... | ..... |
| | 773 | 12.7 | 14.13 | 13.18 | −23.7 | −10.6 | ..... | ..... | ..... | ..... | ..... |
| | 774 | 22.1 | 14.33 | 13.38 | −42.5 | −29.2 | ..... | ..... | ..... | ..... | ..... |
| | 775 | 19.8 | 14.43 | 13.48 | −41.9 | −28.5 | ..... | ..... | ..... | ..... | ..... |
| | 776 | 17.1 | 13.53 | 12.58 | −35.8 | −23.3 | ..... | ..... | ..... | ..... | ..... |
| | 777 | −15.9 | 13.63 | 12.68 | −11.2 | 1.4 | ..... | ..... | ..... | ..... | ..... |
| | 779 | −20.6 | 14.13 | 13.18 | −29.1 | −16.0 | ..... | ..... | ..... | ..... | ..... |
| | 780 | −22.9 | 13.83 | 12.88 | −28.7 | −15.9 | ..... | ..... | ..... | ..... | ..... |
| | 781 | 30.0 | 13.73 | 12.78 | 0.5 | 13.2 | ..... | ..... | ..... | ..... | ..... |
| | 782 | 37.7 | 13.53 | 12.58 | − 2.5 | 10.0 | ..... | ..... | ..... | ..... | ..... |
| | 783 | 38.5 | 13.93 | 12.98 | 23.2 | 36.1 | ..... | ..... | ..... | ..... | ..... |
| | 784 | −26.6 | 14.03 | 13.08 | 8.2 | 21.2 | ..... | ..... | ..... | ..... | ..... |
| | 786 | 23.0 | 14.13 | 13.18 | 25.0 | 38.1 | ..... | ..... | ..... | ..... | ..... |
| | 787 | −23.6 | 14.03 | 13.08 | 22.5 | 35.5 | ..... | ..... | ..... | ..... | ..... |
| | 788 | 17.3 | 13.93 | 12.98 | 8.8 | 21.7 | ..... | ..... | ..... | ..... | ..... |
| | 789 | 12.3 | 13.93 | 12.98 | 10.3 | 23.2 | ..... | ..... | ..... | ..... | ..... |
| | 791 | 33.3 | 12.32 | 11.37 | − 1.2 | 10.1 | ..... | ..... | ..... | ..... | ..... |
| | 792 | −17.9 | 14.33 | 13.38 | −13.0 | 0.3 | ..... | ..... | ..... | ..... | ..... |
| 1054 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| July 2, '04 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| $9^h12^m$ | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 1068 | 793 | 19.3 | 14.56 | 13.61 | −26.8 | −13.5 | ..... | ..... | ..... | ..... | ..... |
| July 12, '04 | 794 | 23.6 | 14.11 | 13.16 | −25.9 | −12.9 | ..... | 13°0 | ..... | ..... | ..... |
| $9^h54^m$ | 795 | 25.7 | 14.32 | 13.37 | −29.1 | −16.0 | ..... | 10.4 | ..... | ..... | ..... |
| | 796 | 17.2 | 14.87 | 13.92 | −16.0 | − 2.4 | ..... | ..... | ..... | ..... | ..... |
| | 797 | 13.0 | 14.66 | 13.71 | −22.3 | − 8.9 | ..... | ..... | ..... | ..... | ..... |
| | 798 | 15.4 | 14.41 | 13.46 | −30.2 | −16.4 | ..... | 10.2 | 23°9 | ..... | ..... |
| | 799 | 16.6 | 14.56 | 13.61 | −32.2 | −18.9 | ..... | ..... | ..... | ..... | ..... |
| | 800 | 11.2 | 14.05 | 13.10 | −30.8 | −18.0 | ..... | ..... | ..... | ..... | ..... |
| | 801 | 19.8 | 12.92 | 11.97 | 5.5 | 17.2 | ..... | ..... | ..... | ..... | ..... |
| | 802 | 29.2 | 12.41 | 11.46 | 3.1 | 14.3 | ..... | ..... | ..... | ..... | ..... |
| | 803 | 25.0 | 14.05 | 13.10 | 7.2 | 20.0 | ..... | ..... | ..... | ..... | ..... |
| | 804 | 16.8 | 14.87 | 13.92 | 6.4 | 20.0 | ..... | ..... | ..... | ..... | ..... |
| | 805 | 12.0 | 15.69 | 14.74 | 12.8 | 27.2 | ..... | ..... | ..... | ..... | ..... |
| | 806 | 17.9 | 14.87 | 13.92 | 18.3 | 31.9 | ..... | ..... | ..... | ..... | ..... |
| | 807 | 25.2 | 14.05 | 13.10 | 21.6 | 34.4 | ..... | ..... | ..... | ..... | ..... |
| | 808 | 12.6 | 14.34 | 13.39 | −37.3 | −24.5 | ..... | 2.2 | ..... | ..... | ..... |
| | 809 | 8.8 | 15.59 | 14.64 | −21.8 | − 7.5 | ..... | ..... | ..... | ..... | ..... |
| | 810 | −25.4 | 12.92 | 11.97 | 23.1 | 34.8 | ..... | ..... | ..... | ..... | ..... |
| | 811 | −24.7 | 13.54 | 12.59 | 21.1 | 33.4 | ..... | ..... | ..... | ..... | ..... |
| 1072 | 812 | −15.0 | 13.90 | 12.95 | −20.8 | ..... | 4°8 | ..... | ..... | ..... | ..... |
| July 13, '04 | 813 | 8.4 | 14.65 | 13.70 | −21.4 | ..... | 6.4 | 20.1 | ..... | ..... | ..... |
| $9^h21^m$ | | | | | | | | | | | |
| 1075 | 814 | −16.2 | 13.92 | 12.97 | 3.1 | 11.9 | ..... | ..... | ..... | ..... | ..... |
| July 15, '04 | 815 | −12.8 | 14.48 | 13.53 | − 5.1 | 9.3 | ..... | ..... | ..... | ..... | ..... |
| $8^h48^m$ | 816 | −12.2 | 14.48 | 13.53 | − 8.2 | 6.2 | ..... | ..... | ..... | ..... | ..... |
| | 817 | −10.6 | 14.68 | 13.73 | −13.9 | 0.7 | ..... | ..... | ..... | ..... | ..... |

TABLE I—*Continued*

| Plate Number and Date | Number | Latitude | Diurnal Motion | | Longitudes on Days of Observation | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sidereal | Synodic | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1075 (*cont.*) | 818 | −15°6 | 14°21 | 13°26 | −12°9 | 2°2 | ..... | 27°3 | ..... | ..... | ..... |
| | 819 | −16.5 | 14.01 | 13.06 | −18.0 | − 4.1 | ..... | ..... | ..... | ..... | ..... |
| | 820 | −25.6 | 14.58 | 13.63 | −19.1 | − 4.6 | ..... | ..... | ..... | ..... | ..... |
| | 821 | −24.4 | 14.30 | 13.35 | −12.1 | − 2.1 | ..... | ..... | ..... | ..... | ..... |
| | 822 | −20.5 | 14.59 | 13.64 | −10.5 | 4.9 | ..... | 30.8 | ..... | ..... | ..... |
| | 823 | −29.4 | 14.77 | 13.82 | −26.9 | −12.2 | ..... | ..... | ..... | ..... | ..... |
| | 824 | −31.8 | 15.42 | 14.47 | −32.0 | −16.6 | ..... | ..... | ..... | ..... | ..... |
| | 825 | −25.6 | 14.39 | 13.44 | −26.8 | −12.5 | ..... | ..... | ..... | ..... | ..... |
| | 826 | −21.5 | 14.48 | 13.53 | −25.0 | −10.6 | ..... | ..... | ..... | ..... | ..... |
| | 827 | 10.4 | 14.36 | 13.41 | − 2.5 | 12.0 | ..... | 38.0 | ..... | ..... | ..... |
| | 828 | 19.6 | 14.26 | 13.31 | − 8.8 | 5.7 | ..... | 31.4 | ..... | ..... | ..... |
| | 829 | 16.7 | 14.29 | 13.34 | −13.5 | 1.0 | ..... | 26.8 | ..... | ..... | ..... |
| | 830 | 12.0 | 12.60 | 11.65 | − 9.9 | 2.5 | ..... | ..... | ..... | ..... | ..... |
| | 831 | 12.4 | 13.83 | 12.88 | −20.4 | − 6.7 | ..... | ..... | ..... | ..... | ..... |
| | 832 | 16.5 | 13.92 | 12.97 | −20.8 | − 7.0 | ..... | ..... | ..... | ..... | ..... |
| | 833 | 17.9 | 14.01 | 13.06 | −24.4 | −10.5 | ..... | ..... | ..... | ..... | ..... |
| | 834 | 16.5 | 14.39 | 13.44 | −27.5 | −13.2 | ..... | ..... | ..... | ..... | ..... |
| | 835 | 19.1 | 13.83 | 12.88 | −28.8 | −15.1 | ..... | ..... | ..... | ..... | ..... |
| | 836 | 19.5 | 13.73 | 12.78 | −32.5 | −18.9 | ..... | ..... | ..... | ..... | ..... |
| | 837 | 15.3 | 14.48 | 13.53 | −30.0 | −15.7 | ..... | 10.8 | ..... | ..... | ..... |
| | 838 | 19.6 | 14.48 | 13.53 | 22.8 | − 8.4 | ..... | ..... | ..... | ..... | ..... |
| | 839 | 16.1 | 14.48 | 13.53 | 13.6 | 28.0 | ..... | ..... | ..... | ..... | ..... |
| | 840 | 35.2 | 13.54 | 12.59 | 22.5 | 35.9 | ..... | ..... | ..... | ..... | ..... |
| | 841 | 26.3 | 13.98 | 13.03 | −22.8 | − 9.5 | ..... | 16.4 | ..... | ..... | ..... |
| | 842 | 15.5 | 14.01 | 13.06 | − 9.3 | 4.6 | ..... | ..... | ..... | ..... | ..... |
| | 843 | 16.9 | 13.83 | 12.88 | − 6.8 | 6.9 | ..... | ..... | ..... | ..... | ..... |
| | 844 | 18.9 | 13.73 | 12.78 | 3.8 | 9.8 | ..... | ..... | ..... | ..... | ..... |
| | 845 | 12.9 | 14.68 | 13.73 | 18.3 | 32.9 | ..... | ..... | ..... | ..... | ..... |
| 1085 | 846 | 13.8 | 13.95 | 13.00 | 16.6 | ..... | 42°0 | ..... | ..... | ..... | ..... |
| July 16, '04 | 847 | −25.1 | 14.11 | 13.16 | −13.6 | ..... | 12.1 | ..... | ..... | ..... | ..... |
| 10h20m | 848 | −22.3 | 13.95 | 13.00 | −14.0 | ..... | 11.4 | ..... | ..... | ..... | ..... |
| | 849 | −19.5 | 14.11 | 13.16 | −13.7 | ..... | 12.0 | ..... | ..... | ..... | ..... |
| | 850 | −19.9 | 14.06 | 13.11 | −17.4 | ..... | 8.2 | ..... | ..... | ..... | ..... |
| | 851 | 13.1 | 14.78 | 13.83 | −10.8 | ..... | 16.2 | ..... | ..... | ..... | ..... |
| | 852 | 15.3 | 13.95 | 13.00 | −20.0 | ..... | 5.4 | ..... | ..... | ..... | ..... |
| | 853 | 16.9 | 14.42 | 13.47 | −23.8 | ..... | 2.5 | ..... | ..... | ..... | ..... |
| 1089 | 855 | −16.0 | 14.61 | 13.66 | −34.4 | ..... | − 7.2 | ..... | ..... | ..... | ..... |
| July 18, '04 | 856 | −22.1 | 14.52 | 13.57 | −36.3 | ..... | − 8.8 | 5.2 | 17°9 | 32°2 | ..... |
| 9h12m | 857 | −17.7 | 13.74 | 12.79 | −46.5 | ..... | −21.0 | ..... | ..... | ..... | ..... |
| | 858 | 10.3 | 14.25 | 13.30 | 12.5 | ..... | 39.0 | ..... | ..... | ..... | ..... |
| | 859 | 11.2 | 14.55 | 13.60 | −32.4 | ..... | − 5.3 | ..... | ..... | ..... | ..... |
| 1097 | 860 | 11.2 | 14.59 | 13.64 | −24.8 | −11.1 | 2.2 | 17.0 | ..... | ..... | ..... |
| July 20, '04 | 861 | 15.4 | 13.91 | 12.96 | −11.9 | 1.3 | 14.1 | 27.8 | ..... | ..... | ..... |
| 9h01m | 862 | 17.2 | 13.85 | 12.90 | − 8.3 | 4.1 | 17.1 | ..... | ..... | ..... | ..... |
| | 863 | 22.3 | 13.96 | 13.01 | −19.7 | − 5.9 | 5.9 | ..... | ..... | ..... | ..... |
| | 864 | 20.1 | 14.16 | 13.21 | −20.5 | − 7.2 | 5.5 | ..... | ..... | ..... | ..... |
| | 865 | 18.7 | 14.23 | 13.28 | −23.4 | −10.3 | 3.0 | 17.2 | ..... | ..... | ..... |
| | 866 | 22.7 | 13.62 | 12.67 | −26.3 | −13.6 | − 0.4 | 12.3 | ..... | ..... | ..... |
| | 867 | 24.3 | 14.38 | 13.43 | −27.5 | −14.1 | ..... | ..... | ..... | ..... | ..... |
| | 868 | − 6.8 | 14.12 | 13.17 | −34.2 | −20.7 | − 7.9 | 6.7 | ..... | 32.2 | ..... |
| | 869 | − 2.1 | 14.88 | 13.93 | −34.1 | −20.2 | ..... | ..... | ..... | ..... | ..... |
| | 870 | − 1.1 | 14.23 | 13.28 | −37.9 | −24.0 | −12.5 | 3.0 | ..... | 29.1 | ..... |
| | 871 | 10.9 | 14.08 | 13.13 | −42.1 | −29.0 | ..... | ..... | ..... | ..... | ..... |
| | 872 | 13.3 | 14.21 | 13.26 | −39.4 | −26.3 | −13.3 | ..... | ..... | ..... | ..... |
| | 873 | −13.3 | 14.58 | 13.63 | 31.4 | 45.0 | ..... | ..... | ..... | ..... | ..... |
| 1103 | 875 | 10.7 | 14.67 | 13.72 | 22.4 | 35.7 | ..... | ..... | ..... | ..... | ..... |
| July 21,' 04 | 876 | 12.0 | 14.88 | 13.93 | 4.2 | 17.7 | ..... | ..... | ..... | ..... | ..... |
| 8h58m | 877 | −17.8 | 14.15 | 13.20 | 11.0 | 23.8 | ..... | ..... | ..... | ..... | ..... |
| | 878 | −24.4 | 14.68 | 13.73 | 4.5 | 12.8 | 32.9 | ..... | ..... | ..... | ..... |
| | 879 | −16.0 | 14.11 | 13.16 | − 2.8 | 9.5 | 24.4 | ..... | ..... | ..... | ..... |
| | 880 | −21.3 | 14.20 | 13.25 | − 0.2 | 12.2 | 27.2 | ..... | ..... | ..... | ..... |
| | 881 | −19.3 | 14.15 | 13.20 | − 6.1 | 6.7 | ..... | ..... | ..... | ..... | ..... |
| | 882 | −26.0 | 13.33 | 12.38 | − 2.7 | 9.3 | ..... | ..... | ..... | ..... | ..... |
| | 883 | −25.0 | 14.29 | 13.34 | − 6.1 | 6.7 | 21.5 | ..... | ..... | ..... | ..... |
| | 884 | −22.1 | 14.06 | 13.11 | −10.9 | 1.2 | 16.2 | ..... | ..... | ..... | ..... |
| | 885 | − 8.3 | 13.96 | 13.01 | − 2.8 | 9.6 | 24.1 | ..... | ..... | ..... | ..... |

TABLE I—*Continued*

| Plate Number and Date | Number | Latitude | Diurnal Motion | | Longitudes on Days of Observation | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sidereal | Synodic | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1103 (*cont.*) | 886 | − 6°6 | 14°05 | 13°10 | − 6°7 | 6°2 | 20°4 | ..... | ..... | ..... | ..... |
| | 887 | −21.2 | 14.05 | 13.10 | −18.7 | − 6.0 | ..... | ..... | ..... | ..... | ..... |
| | 888 | −15.9 | 14.56 | 13.61 | −25.3 | −12.1 | ..... | ..... | ..... | ..... | ..... |
| | 889 | − 8.0 | 14.15 | 13.20 | −26.8 | −14.0 | ..... | ..... | ..... | ..... | ..... |
| | 890 | 11.6 | 14.14 | 13.19 | − 7.2 | 6.0 | 20.1 | ..... | ..... | ..... | ..... |
| | 891 | 13.9 | 14.44 | 13.49 | −12.9 | − 0.1 | 15.0 | ..... | ..... | ..... | ..... |
| | 892 | 17.8 | 13.90 | 12.95 | −17.0 | − 4.3 | 9.8 | ..... | ..... | ..... | ..... |
| | 893 | 23.2 | 13.59 | 12.64 | −19.0 | − 6.2 | 7.2 | ..... | 32°2 | ..... | ..... |
| 1108 | | | | | | | | | | | |
| July 22, '04 | 894 | −21.2 | 14.33 | 13.38 | 20.0 | 34.7 | ..... | ..... | ..... | ..... | ..... |
| $8^h14^m$ | 895 | 1.6 | 14.60 | 13.65 | −11.0 | 4.0 | ..... | ..... | ..... | ..... | ..... |
| 1113 | 896 | 23.7 | 13.81 | 12.86 | 13.9 | ..... | 39.2 | ..... | ..... | ..... | ..... |
| July 23, '04 | 897 | −10.9 | 13.67 | 12.72 | 1.4 | ..... | 26.4 | ..... | ..... | ..... | ..... |
| $10^h37^m$ | 898 | −17.8 | 14.03 | 13.08 | −24.5 | ..... | 1.3 | ..... | 26.8 | ..... | ..... |
| | 899 | 21.4 | 13.81 | 12.86 | 19.8 | ..... | 45.1 | ..... | ..... | ..... | ..... |
| 1118 | 900 | −19.0 | 13.84 | 12.88 | 1.2 | ..... | 26.3 | 39°0 | ..... | ..... | ..... |
| July 25, '04 | 901 | 24.5 | 13.80 | 12.84 | −28.5 | ..... | − 3.6 | 9.2 | ..... | ..... | ..... |
| $9^h49^m$ | 902 | −16.7 | 14.56 | 13.60 | −48.5 | ..... | −22.0 | − 8.6 | ..... | ..... | ..... |
| | 904 | −21.0 | 14.19 | 13.23 | −44.5 | ..... | −18.6 | − 5.7 | ..... | ..... | ..... |
| | 905 | 29.1 | 13.51 | 12.55 | −38.0 | ..... | −13.5 | − 1.2 | ..... | ..... | ..... |
| | 906 | −20.8 | 13.62 | 12.66 | − 2.0 | ..... | 22.5 | ..... | ..... | ..... | ..... |
| | 907 | 27.4 | 13.79 | 12.83 | −38.4 | ..... | −13.2 | − 0.8 | ..... | ..... | ..... |
| 1122 | 903 | −15.3 | 14.13 | 13.17 | −24.3 | −11.1 | ..... | ..... | ..... | ..... | ..... |
| July 27, '04 | 908 | 18.8 | 14.43 | 13.47 | 8.5 | 22.0 | ..... | ..... | ..... | ..... | ..... |
| $8^h15^m$ | 909 | 19.6 | 14.63 | 13.67 | 7.3 | 21.0 | ..... | ..... | ..... | ..... | ..... |
| | 910 | 17.6 | 14.73 | 13.77 | 7.0 | 20.8 | ..... | ..... | ..... | ..... | ..... |
| | 911 | 12.1 | 14.53 | 13.57 | 24.9 | 38.5 | ..... | ..... | ..... | ..... | ..... |
| | 912 | 13.7 | 13.53 | 12.57 | 17.9 | 30.5 | ..... | ..... | ..... | ..... | ..... |
| | 913 | 9.0 | 14.13 | 13.17 | −11.3 | 1.9 | ..... | ..... | ..... | ..... | ..... |
| | 914 | 17.2 | 13.83 | 12.87 | − 1.0 | 11.9 | ..... | ..... | ..... | ..... | ..... |
| | 915 | 20.4 | 14.43 | 13.47 | − 0.3 | 13.2 | ..... | ..... | ..... | ..... | ..... |
| | 916 | 22.6 | 14.23 | 13.27 | 0.6 | 13.9 | ..... | ..... | ..... | ..... | ..... |
| | 917 | 17.7 | 14.03 | 13.07 | − 4.0 | 9.1 | ..... | ..... | ..... | ..... | ..... |
| | 918 | 17.7 | 14.63 | 13.67 | − 7.5 | 6.2 | ..... | ..... | ..... | ..... | ..... |
| | 919 | 24.5 | 14.23 | 14.27 | −15.6 | − 2.3 | ..... | ..... | ..... | ..... | ..... |
| | 920 | 24.8 | 13.13 | 12.17 | −18.2 | − 6.0 | ..... | ..... | ..... | ..... | ..... |
| | 921 | 16.0 | 14.43 | 13.47 | 3.8 | 17.3 | ..... | ..... | ..... | ..... | ..... |
| | 922 | 18.8 | 14.23 | 13.27 | 2.5 | 15.8 | ..... | ..... | ..... | ..... | ..... |
| | 923 | 18.5 | 14.13 | 13.17 | −21.3 | − 8.1 | ..... | ..... | ..... | ..... | ..... |
| | 924 | 15.7 | 14.33 | 13.37 | −20.2 | − 6.8 | ..... | ..... | ..... | ..... | ..... |
| | 925 | −22.5 | 14.53 | 13.57 | −15.4 | − 1.8 | ..... | ..... | ..... | ..... | ..... |
| | 926 | −19.6 | 14.13 | 13.17 | −16.9 | − 3.7 | ..... | ..... | ..... | ..... | ..... |
| | 927 | −22.1 | 14.53 | 13.57 | −21.0 | − 7.4 | ..... | ..... | ..... | ..... | ..... |
| | 928 | −28.1 | 13.93 | 12.97 | −26.0 | −13.0 | ..... | ..... | ..... | ..... | ..... |
| | 929 | −26.9 | 14.63 | 13.67 | −31.0 | −17.3 | ..... | ..... | ..... | ..... | ..... |
| | 930 | −23.8 | 14.43 | 13.47 | −29.5 | −16.0 | ..... | ..... | ..... | ..... | ..... |
| | 931 | −24.8 | 14.03 | 13.07 | −35.5 | −22.4 | ..... | ..... | ..... | ..... | ..... |
| | 932 | −19.8 | 14.03 | 13.07 | −39.0 | −25.9 | ..... | ..... | ..... | ..... | ..... |
| | 933 | 14.8 | 15.73 | 14.77 | −25.3 | −10.5 | ..... | ..... | ..... | ..... | ..... |
| | 934 | 14.0 | 14.73 | 13.77 | −36.7 | −22.9 | ..... | ..... | ..... | ..... | ..... |
| | 935 | 15.7 | 14.63 | 13.67 | −36.7 | −23.0 | ..... | ..... | ..... | ..... | ..... |
| | 936 | −18.5 | 14.23 | 13.27 | −30.0 | −16.7 | ..... | ..... | ..... | ..... | ..... |
| | 937 | −31.2 | 12.83 | 11.87 | 22.9 | 34.8 | ..... | ..... | ..... | ..... | ..... |
| | 938 | −30.5 | 14.03 | 13.07 | 17.8 | 30.9 | ..... | ..... | ..... | ..... | ..... |
| | 939 | −25.8 | 13.83 | 12.87 | 14.0 | 26.9 | ..... | ..... | ..... | ..... | ..... |
| | 940 | −26.5 | 14.23 | 13.27 | 6.4 | 19.7 | ..... | ..... | ..... | ..... | ..... |
| | 941 | 9.0 | 15.23 | 14.27 | −25.5 | −11.2 | ..... | ..... | ..... | ..... | ..... |
| | 942 | −18.5 | 15.23 | 14.27 | −23.9 | − 9.6 | ..... | ..... | ..... | ..... | ..... |
| | 943 | −19.0 | 15.33 | 14.37 | −25.4 | 11.0 | ..... | ..... | ..... | ..... | ..... |
| | 944 | −18.5 | 14.33 | 13.37 | −13.2 | 0.2 | ..... | ..... | ..... | ..... | ..... |
| | 945 | −16.8 | 13.73 | 12.77 | − 8.1 | 4.7 | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 1130 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| July 28, '04 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| $8^h18^m$ | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |

TABLE 1—*Continued*

| Plate Number and Date | Number | Latitude | Diurnal Motion | | Longitudes on Days of Observation | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sidereal | Synodic | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1142 | 946 | −24°3 | 13°05 | 12°09 | − 4°0 | 8°1 | ..... | ..... | ..... | ..... | ..... |
| Aug. 1, '04 | 947 | −17.1 | 13.87 | 12.91 | − 7.9 | 5.3 | 17°9 | ..... | ..... | ..... | ..... |
| 8h32m5 | 948 | −21.1 | 13.65 | 12.69 | − 11.0 | 1.7 | ..... | ..... | ..... | ..... | ..... |
| | 949 | −18.7 | 13.07 | 12.11 | − 18.0 | − 5.9 | 6.2 | ..... | ..... | ..... | ..... |
| | 950 | −16.4 | 13.55 | 12.59 | − 14.4 | − 1.8 | ..... | ..... | ..... | ..... | ..... |
| | 951 | −24.7 | 13.25 | 12.29 | 29.7 | 42.0 | ..... | ..... | ..... | ..... | ..... |
| | 952 | −19.1 | 13.45 | 12.49 | 31.6 | 44.1 | ..... | ..... | ..... | ..... | ..... |
| | 953 | −20.0 | 13.95 | 12.99 | 23.5 | 36.5 | ..... | ..... | ..... | ..... | ..... |
| | 954 | −14.7 | 13.45 | 12.49 | 22.8 | 35.3 | ..... | ..... | ..... | ..... | ..... |
| | 955 | −21.3 | 14.12 | 13.16 | 20.1 | 33.3 | 46.4 | ..... | ..... | ..... | ..... |
| | 956 | −20.6 | 13.87 | 12.91 | 17.2 | 30.1 | 43.0 | ..... | ..... | ..... | ..... |
| | 958 | 10.8 | 14.55 | 13.59 | 31.1 | 44.7 | ..... | ..... | ..... | ..... | ..... |
| | 959 | 13.7 | 13.65 | 12.69 | 33.9 | 46.6 | ..... | ..... | ..... | ..... | ..... |
| | 960 | 16.7 | 13.95 | 12.99 | 30.3 | 43.3 | ..... | ..... | ..... | ..... | ..... |
| | 961 | 11.2 | 13.72 | 12.76 | 5.0 | 18.5 | 30.5 | ..... | ..... | ..... | ..... |
| | 962 | 18.8 | 14.12 | 13.16 | 4.5 | 17.6 | 30.8 | ..... | ..... | ..... | ..... |
| | 963 | 14.2 | 13.87 | 12.91 | − 0.3 | 12.4 | 25.5 | ..... | ..... | ..... | ..... |
| | 964 | 16.3 | 13.62 | 12.66 | − 1.8 | 10.9 | 23.5 | ..... | ..... | ..... | ..... |
| | 965 | 18.9 | 13.72 | 12.76 | − 0.5 | 12.2 | 25.0 | ..... | ..... | ..... | ..... |
| | 966 | 19.7 | 14.27 | 13.31 | − 4.3 | 8.7 | 22.3 | ..... | ..... | ..... | ..... |
| | 967 | 22.6 | 13.92 | 12.96 | − 6.8 | 6.4 | 19.1 | ..... | ..... | ..... | ..... |
| | 968 | 10.4 | 13.77 | 12.81 | − 3.5 | 9.4 | 22.1 | ..... | ..... | ..... | ..... |
| | 969 | 14.3 | 13.87 | 12.91 | − 9.7 | 3.3 | 16.1 | ..... | ..... | ..... | ..... |
| | 970 | 17.2 | 15.15 | 14.19 | − 8.6 | 5.6 | ..... | ..... | ..... | ..... | ..... |
| | 971 | 25.5 | 14.57 | 13.61 | −14.3 | − 0.7 | 12.9 | ..... | ..... | ..... | ..... |
| | 972 | 30.5 | 13.62 | 12.66 | −15.2 | − 2.7 | 10.1 | ..... | ..... | ..... | ..... |
| | 973 | 18.4 | 14.17 | 13.21 | −18.5 | − 5.7 | 7.9 | ..... | ..... | ..... | ..... |
| | 974 | 12.5 | 14.22 | 13.26 | − 3.8 | 9.4 | 22.7 | ..... | ..... | ..... | ..... |
| | 975 | 28.4 | 13.65 | 12.69 | 2.2 | 14.9 | ..... | ..... | ..... | ..... | ..... |
| | 976 | 29.8 | 13.65 | 12.69 | 1.2 | 13.9 | ..... | ..... | ..... | ..... | ..... |
| | 977 | 31.8 | 13.45 | 12.49 | 0.2 | 12.7 | ..... | ..... | ..... | ..... | ..... |
| | 978 | 37.1 | 12.45 | 11.49 | 0.5 | 12.0 | ..... | ..... | ..... | ..... | ..... |
| | 979 | 50.0 | 11.14 | 10.18 | 5.7 | 15.9 | ..... | ..... | ..... | ..... | ..... |
| | 980 | 40.6 | 12.85 | 11.89 | 21.0 | 32.9 | ..... | ..... | ..... | ..... | ..... |
| | 982 | 15.1 | 13.25 | 12.29 | −33.2 | −20.9 | ..... | ..... | ..... | ..... | ..... |
| | 983 | 12.1 | 13.77 | 12.81 | −35.1 | −22.4 | − 9.5 | ..... | ..... | ..... | ..... |
| | 984 | 11.7 | 14.25 | 13.29 | −40.3 | −27.0 | ..... | ..... | ..... | ..... | ..... |
| | 985 | 11.9 | 14.37 | 13.41 | −42.0 | −29.3 | −15.2 | ..... | ..... | ..... | ..... |
| | 986 | −26.3 | 12.55 | 11.59 | 15.3 | 26.9 | ..... | ..... | ..... | ..... | ..... |
| | 987 | 14.1 | 13.62 | 12.66 | −42.1 | −29.9 | −16.8 | ..... | ..... | ..... | ..... |
| | 988 | − 4.6 | 13.55 | 12.59 | −15.7 | − 3.1 | ..... | ..... | ..... | ..... | ..... |
| 1147 | 989 | −15.7 | 12.89 | 11.93 | − 5.1 | 6.8 | ..... | ..... | ..... | ..... | ..... |
| Aug. 2, '04 | 990 | 19.7 | 13.50 | 12.54 | −18.3 | − 5.8 | ..... | ..... | ..... | ..... | ..... |
| 8h34m | 991 | 22.1 | 13.50 | 12.54 | −20.0 | − 7.5 | ..... | ..... | ..... | ..... | ..... |
| | 992 | 19.6 | 14.60 | 13.64 | −24.9 | −11.3 | ..... | ..... | ..... | ..... | ..... |
| | 993 | 13.2 | 14.20 | 13.24 | −27.8 | −14.6 | ..... | ..... | ..... | ..... | ..... |
| | 996 | 10.7 | 13.70 | 12.74 | − 1.4 | 11.3 | ..... | ..... | ..... | ..... | ..... |
| | 997 | 19.7 | 14.00 | 13.04 | − 1.2 | 11.8 | ..... | ..... | ..... | ..... | ..... |
| | 998 | 21.7 | 14.40 | 13.44 | − 0.6 | 12.8 | ..... | ..... | ..... | ..... | ..... |
| | 999 | 22.2 | 13.90 | 12.94 | 1.2 | 14.1 | ..... | ..... | ..... | ..... | ..... |
| | 1000 | 17.7 | 13.70 | 12.74 | 1.5 | 14.2 | ..... | ..... | ..... | ..... | ..... |
| | 1001 | 11.1 | 14.50 | 13.54 | 6.5 | 20.0 | ..... | ..... | ..... | ..... | ..... |
| | 1002 | 14.0 | 13.50 | 12.54 | 6.8 | 19.3 | ..... | ..... | ..... | ..... | ..... |
| | 1003 | −14.6 | 13.30 | 13.34 | 7.5 | 20.8 | ..... | ..... | ..... | ..... | ..... |
| 1154 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Aug. 3, '04 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 8h30m | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 1160 | 1004 | 6.7 | 15.43 | 14.47 | −42.9 | ..... | −14.1 | ..... | ..... | ..... | ..... |
| Aug. 6, '04 | 1005 | 12.4 | 14.68 | 13.72 | −41.1 | ..... | −13.8 | ..... | ..... | ..... | ..... |
| 9h32m | 1006 | 24.8 | 13.32 | 12.36 | −23.8 | ..... | 0.8 | ..... | ..... | ..... | ..... |
| | 1007 | 28.4 | 13.87 | 12.91 | −25.1 | ..... | 0.6 | ..... | ..... | ..... | ..... |
| | 1008 | 28.2 | 14.02 | 13.06 | −30.1 | ..... | − 4.1 | ..... | ..... | ..... | ..... |
| | 1009 | 26.0 | 14.02 | 13.06 | −32.1 | ..... | − 6.1 | ..... | ..... | ..... | ..... |
| | 1013 | 25.9 | 13.63 | 12.67 | 21.3 | ..... | 46.5 | ..... | ..... | ..... | ..... |

TABLE I—*Continued*

| Plate Number and Date | Number | Latitude | Diurnal Motion | | Longitudes on Days of Observation | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sidereal | Synodic | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1160 (*cont.*) | 1014 | 29°3 | 13°17 | 12°21 | 15°0 | ..... | 39°3 | ..... | ..... | ..... | ..... |
| | 1015 | 23.5 | 14.63 | 13.67 | 10.4 | ..... | 37.6 | ..... | ..... | ..... | ..... |
| | 1016 | 22.2 | 12.62 | 11.66 | 5.0 | ..... | 28.2 | ..... | ..... | ..... | ..... |
| | 1017 | 25.5 | 13.87 | 12.91 | 5.2 | ..... | 30.9 | ..... | ..... | ..... | ..... |
| | 1018 | 24.4 | 13.32 | 12.36 | 4.0 | ..... | 28.6 | ..... | ..... | ..... | ..... |
| | 1019 | 26.3 | 13.27 | 12.31 | 2.8 | ..... | 27.3 | ..... | ..... | ..... | ..... |
| | 1020 | 8.9 | 14.48 | 13.52 | −47.4 | ..... | −20.5 | ..... | ..... | ..... | ..... |
| | 1021 | 30.3 | 13.87 | 12.91 | −31.6 | ..... | − 5.9 | ..... | ..... | ..... | ..... |
| | 1022 | 32.5 | 13.47 | 12.51 | −36.3 | ..... | −11.4 | ..... | ..... | ..... | ..... |
| | 1023 | 16.4 | 14.83 | 13.87 | −43.6 | ..... | −16.0 | ..... | ..... | ..... | ..... |
| | 1026 | 26.8 | 13.67 | 12.71 | −19.8 | ..... | 5.1 | ..... | ..... | 43°3 | ..... |
| 1167 | 1024 | 18.9 | 14.02 | 13.06 | −20.9 | ..... | ..... | 18°0 | ..... | ..... | ..... |
| Aug. 8, '04 | 1025 | 20.9 | 14.05 | 13.09 | −22.2 | ..... | ..... | 16.8 | ..... | ..... | ..... |
| $9^h17^m5$ | | | | | | | | | | | |
| 1173 | 1030 | 10.0 | 14.52 | 13.55 | 27.2 | 40°7 | ..... | ..... | ..... | ..... | ..... |
| Aug. 11, '04 | 1031 | 7.6 | 14.32 | 13.35 | 21.9 | 35.2 | ..... | ..... | ..... | ..... | ..... |
| $8^h45^m5$ | 1032 | 15.3 | 14.42 | 13.45 | 21.9 | 35.3 | ..... | ..... | ..... | ..... | ..... |
| | 1033 | 11.9 | 14.42 | 13.45 | 15.7 | 28.9 | 42.9 | ..... | ..... | ..... | ..... |
| | 1034 | 11.0 | 15.02 | 14.05 | 12.8 | 26.8 | ..... | ..... | ..... | ..... | ..... |
| | 1035 | 10.5 | 14.52 | 13.55 | 9.8 | 24.0 | 37.2 | ..... | ..... | ..... | ..... |
| | 1036 | 11.6 | 14.42 | 13.45 | 7.3 | 20.9 | 34.5 | ..... | ..... | ..... | ..... |
| | 1037 | 10.7 | 14.22 | 13.25 | 3.9 | 17.1 | 30.7 | ..... | ..... | ..... | ..... |
| | 1038 | 6.7 | 14.52 | 13.55 | 8.8 | 22.3 | ..... | ..... | ..... | ..... | ..... |
| | 1039 | 0.6 | 14.82 | 13.85 | 0.5 | 14.3 | 28.5 | ..... | ..... | ..... | ..... |
| | 1040 | 15.1 | 14.37 | 13.40 | 13.9 | 27.5 | 41.0 | ..... | ..... | ..... | ..... |
| | 1041 | 16.8 | 14.22 | 13.25 | 13.0 | 26.1 | 39.8 | ..... | ..... | ..... | ..... |
| | 1042 | 18.8 | 14.77 | 13.80 | 10.9 | 24.5 | 38.8 | ..... | ..... | ..... | ..... |
| | 1043 | 19.1 | 14.03 | 13.06 | 6.6 | 20.0 | 33.0 | ..... | ..... | ..... | ..... |
| | 1044 | 17.0 | 14.32 | 13.35 | 3.9 | 17.5 | 30.9 | ..... | ..... | ..... | ..... |
| | 1045 | 23.2 | 14.12 | 13.15 | −16.0 | − 2.9 | ..... | ..... | ..... | ..... | ..... |
| | 1046 | 14.5 | 13.83 | 12.86 | −27.3 | −14.8 | − 1.3 | ..... | ..... | ..... | ..... |
| | 1048 | 17.8 | 12.61 | 11.64 | −25.4 | −13.8 | ..... | ..... | ..... | ..... | ..... |
| | 1049 | 14.3 | 13.81 | 12.84 | −21.7 | − 8.9 | ..... | ..... | ..... | ..... | ..... |
| | 1050 | −16.2 | 13.83 | 12.86 | − 6.7 | 6.3 | 19.9 | ..... | ..... | ..... | ..... |
| | 1051 | −16.1 | 14.22 | 13.25 | −10.4 | 2.8 | 16.4 | ..... | ..... | ..... | ..... |
| | 1052 | −20.3 | 13.98 | 13.01 | −12.2 | 0.9 | 14.1 | ..... | ..... | ..... | ..... |
| | 1053 | −22.1 | 14.27 | 13.30 | −16.9 | − 3.8 | 10.0 | ..... | ..... | ..... | ..... |
| | 1054 | −23.9 | 14.77 | 13.80 | −14.8 | − 1.1 | 13.1 | ..... | ..... | ..... | ..... |
| | 1055 | −14.0 | 14.62 | 13.65 | −24.9 | −11.7 | 2.7 | ..... | ..... | ..... | ..... |
| | 1056 | −10.2 | 14.82 | 13.85 | −25.1 | −11.5 | 2.9 | ..... | ..... | ..... | ..... |
| | 1057 | − 8.6 | 14.92 | 13.95 | −27.6 | −13.7 | 0.6 | ..... | ..... | ..... | ..... |
| | 1058 | −15.6 | 14.13 | 13.16 | −28.4 | −15.2 | − 1.8 | ..... | ..... | ..... | ..... |
| | 1059 | −17.2 | 14.27 | 13.30 | −29.4 | −16.0 | − 2.5 | ..... | ..... | ..... | ..... |
| | 1060 | −17.3 | 14.52 | 13.55 | −31.5 | −18.3 | − 4.1 | ..... | ..... | ..... | ..... |
| | 1061 | −11.7 | 14.60 | 13.63 | −32.0 | −18.4 | − 4.5 | ..... | ..... | ..... | ..... |
| | 1062 | −10.5 | 14.62 | 13.65 | −33.8 | −20.7 | − 6.2 | ..... | ..... | ..... | ..... |
| | 1063 | −12.5 | 14.52 | 13.55 | −35.4 | −22.7 | − 8.0 | ..... | ..... | ..... | ..... |
| | 1064 | −15.2 | 15.56 | 14.59 | −36.6 | −22.7 | − 7.1 | ..... | ..... | ..... | ..... |
| | 1065 | − 8.3 | 14.67 | 13.70 | −31.3 | −17.8 | − 3.6 | ..... | ..... | ..... | ..... |
| | 1066 | 2.6 | 14.32 | 13.35 | 6.1 | 19.4 | ..... | ..... | ..... | ..... | ..... |
| 1182 | 1047 | 20.8 | 14.83 | 13.86 | −35.7 | −21.5 | ..... | ..... | ..... | ..... | ..... |
| Aug. 12, '04 | 1067 | 11.2 | 14.72 | 13.75 | 32.4 | 46.5 | ..... | ..... | ..... | ..... | ..... |
| $8^h41^m$ | 1068 | 16.0 | 14.14 | 13.17 | 25.0 | 38.5 | ..... | ..... | ..... | ..... | ..... |
| | 1069 | 16.7 | 13.75 | 12.78 | 24.0 | 37.1 | ..... | ..... | ..... | ..... | ..... |
| | 1070 | 14.6 | 14.23 | 13.26 | 6.3 | 19.9 | ..... | ..... | ..... | ..... | ..... |
| | 1071 | 19.7 | 15.12 | 14.15 | − 1.9 | 12.6 | ..... | ..... | ..... | ..... | ..... |
| | 1072 | 22.9 | 13.26 | 12.29 | 13.6 | 26.2 | ..... | ..... | ..... | ..... | ..... |
| | 1073 | −17.0 | 14.63 | 13.66 | 23.5 | 37.5 | ..... | ..... | ..... | ..... | ..... |
| | 1074 | −18.8 | 14.53 | 13.56 | 28.0 | 41.9 | ..... | ..... | ..... | ..... | ..... |
| | 1075 | −22.3 | 14.04 | 13.07 | 26.5 | 39.9 | ..... | ..... | ..... | ..... | ..... |
| | 1076 | −16.3 | 14.63 | 13.66 | − 6.1 | 7.9 | ..... | ..... | ..... | ..... | ..... |
| | 1077 | −19.6 | 14.43 | 13.46 | − 7.8 | 6.0 | ..... | ..... | ..... | ..... | ..... |
| | 1078 | −13.4 | 12.87 | 11.90 | −41.0 | 28.8 | ..... | ..... | ..... | ..... | ..... |
| | 1079 | −11.5 | 14.04 | 13.07 | −44.2 | −30.8 | ..... | ..... | ..... | ..... | ..... |
| | 1081 | −23.3 | 13.75 | 12.78 | −23.9 | −10.8 | ..... | ..... | ..... | ..... | ..... |
| | 1083 | 35.2 | 13.16 | 12.19 | 33.2 | 45.7 | ..... | ..... | ..... | ..... | ..... |

TABLE I—*Continued*

| Plate Number and Date | Number | Latitude | Diurnal Motion | | Longitudes on Days of Observation | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sidereal | Synodic | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1187 Aug. 13, '04 $9^h17^m$ | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 1207 Aug. 23, '04 $8^h59^m$ | 1084 | 8°.7 | 14°.65 | 13°.68 | 7°.0 | 20°.3 | 33°.9 | 48°.0 | ..... | ..... | ..... |
| | 1085 | 11.5 | 14.10 | 13.13 | 4.9 | 17.5 | 31.0 | ..... | ..... | ..... | ..... |
| | 1086 | 11.3 | 14.35 | 13.38 | 2.0 | 15.4 | 29.0 | 42.0 | ..... | ..... | ..... |
| | 1088 | 20.4 | 14.60 | 13.63 | 8.5 | 21.9 | 35.6 | ..... | ..... | ..... | ..... |
| | 1089 | 18.6 | 14.95 | 13.98 | 5.3 | 18.3 | 32.4 | 47.1 | ..... | ..... | ..... |
| | 1090 | 20.9 | 13.98 | 13.01 | 3.9 | 17.2 | 30.4 | 42.8 | ..... | ..... | ..... |
| | 1091 | 18.8 | 14.50 | 13.53 | 1.3 | 14.9 | 28.5 | 41.8 | ..... | ..... | ..... |
| | 1092 | 22.8 | 14.02 | 13.05 | 0.1 | 13.4 | 26.4 | 39.2 | ..... | ..... | ..... |
| | 1093 | 21.1 | 14.28 | 13.31 | − 7.6 | 5.1 | 18.6 | 32.2 | ..... | ..... | ..... |
| | 1094 | 20.1 | 14.34 | 13.37 | − 9.8 | 3.4 | 16.9 | 30.2 | ..... | ..... | ..... |
| | 1095 | 19.6 | 14.02 | 13.05 | −14.1 | − 1.5 | 11.5 | 25.0 | ..... | ..... | ..... |
| | 1096 | 22.1 | 14.88 | 13.91 | −16.6 | − 3.1 | ..... | ..... | ..... | ..... | ..... |
| | 1097 | 11.7 | 14.80 | 13.83 | −15.9 | − 2.0 | 11.6 | ..... | ..... | ..... | ..... |
| | 1098 | 12.1 | 14.47 | 13.50 | −18.9 | − 5.8 | ..... | ..... | ..... | ..... | ..... |
| | 1099 | 16.0 | 14.36 | 13.39 | −20.2 | − 7.2 | ..... | ..... | ..... | ..... | ..... |
| | 1100 | 18.3 | 13.89 | 12.92 | −24.0 | −11.2 | 1.7 | 14.7 | ..... | ..... | ..... |
| | 1101 | 9.5 | 14.87 | 13.90 | −21.2 | − 7.3 | 9.7 | 19.4 | ..... | ..... | ..... |
| | 1102 | 11.5 | 14.11 | 13.14 | −25.0 | −12.2 | 1.1 | 14.3 | ..... | ..... | ..... |
| | 1103 | 14.7 | 14.30 | 13.33 | −25.8 | −12.9 | 0.8 | 14.0 | ..... | ..... | ..... |
| | 1104 | −23.0 | 14.88 | 13.91 | −17.0 | − 3.5 | ..... | ..... | ..... | ..... | ..... |
| | 1105 | −23.6 | 13.90 | 12.93 | −20.6 | − 7.4 | 4.7 | 18.4 | ..... | ..... | ..... |
| | 1106 | −25.5 | 13.59 | 12.62 | −22.0 | − 8.6 | 3.1 | ..... | ..... | ..... | ..... |
| | 1107 | −22.1 | 14.11 | 13.14 | −24.9 | −12.0 | 1.0 | 14.5 | ..... | ..... | ..... |
| | 1108 | −27.3 | 13.68 | 12.71 | −28.1 | −15.0 | − 2.1 | 9.9 | ..... | ..... | ..... |
| | 1109 | −24.2 | 13.99 | 13.02 | −28.5 | −16.0 | − 2.7 | 10.4 | ..... | ..... | ..... |
| | 1110 | −27.1 | 13.95 | 12.98 | −32.0 | −19.4 | ..... | ..... | ..... | ..... | ..... |
| | 1111 | −16.1 | 13.64 | 12.67 | 30.7 | 43.0 | ..... | ..... | ..... | ..... | ..... |
| | 1112 | −17.7 | 14.69 | 13.72 | −37.3 | −24.1 | −10.7 | 3.9 | ..... | ..... | ..... |
| | 1113 | −14.8 | 14.48 | 13.51 | −35.3 | −22.0 | − 8.3 | 5.0 | ..... | ..... | ..... |
| | 1114 | −12.9 | 13.95 | 12.98 | −35.7 | −22.9 | − 9.9 | ..... | ..... | ..... | ..... |
| | 1115 | 28.0 | 14.15 | 13.18 | −22.8 | −10.0 | ..... | ..... | ..... | ..... | ..... |
| | 1116 | 32.0 | 14.36 | 13.39 | −27.7 | −14.7 | ..... | ..... | ..... | ..... | ..... |
| | 1117 | 30.5 | 14.47 | 13.50 | −26.0 | −12.9 | ..... | ..... | ..... | ..... | ..... |
| | 1118 | 33.9 | 14.77 | 13.80 | −29.9 | −16.5 | ..... | ..... | ..... | ..... | ..... |
| | 1119 | 37.1 | 14.05 | 13.08 | −28.1 | −15.4 | ..... | ..... | ..... | ..... | ..... |
| | 1120 | −18.5 | 14.03 | 13.06 | −44.1 | −31.0 | −17.9 | − 5.0 | ..... | ..... | ..... |
| | 1121 | −20.1 | 14.54 | 13.57 | −42.1 | −29.2 | −15.5 | − 1.5 | ..... | ..... | ..... |
| | 1122 | −23.1 | 13.87 | 12.90 | −42.8 | −30.0 | −17.0 | − 4.2 | ..... | ..... | ..... |
| 1218 Aug. 24, '04 $8^h16^m.5$ | 1123 | 16.4 | 13.94 | 12.97 | 5.9 | 19.1 | ..... | ..... | ..... | ..... | ..... |
| | 1124 | 16.4 | 13.45 | 12.48 | − 6.0 | 6.7 | ..... | ..... | ..... | ..... | ..... |
| | 1125 | 27.5 | 13.85 | 12.88 | −11.8 | 1.0 | 14.2 | ..... | ..... | ..... | ..... |
| | 1126 | 10.9 | 14.40 | 13.43 | 18.0 | 31.8 | 45.1 | ..... | ..... | ..... | ..... |
| | 1127 | 33.5 | 13.26 | 12.29 | −22.8 | −10.4 | 2.0 | ..... | ..... | ..... | ..... |
| | 1128 | 36.4 | 12.62 | 11.65 | −23.5 | −11.7 | 0.0 | ..... | ..... | ..... | ..... |
| | 1130 | 15.7 | 14.50 | 13.53 | −42.3 | −28.6 | −15.0 | ..... | ..... | ..... | ..... |
| | 1131 | 23.9 | 13.94 | 12.97 | −38.8 | −25.6 | ..... | ..... | ..... | ..... | ..... |
| | 1132 | − 5.7 | 15.03 | 14.06 | −16.3 | − 2.0 | ..... | ..... | ..... | ..... | ..... |
| 1234 Aug. 25, '04 $8^h41^m.5$ | 1133 | 18.7 | 14.47 | 13.50 | 13.5 | 27.0 | ..... | ..... | ..... | ..... | ..... |
| | 1134 | 24.0 | 13.57 | 12.60 | 16.4 | 29.0 | ..... | ..... | ..... | ..... | ..... |
| | 1135 | 11.4 | 14.87 | 13.90 | 8.9 | 22.8 | ..... | ..... | ..... | ..... | ..... |
| | 1136 | 13.1 | 14.07 | 13.10 | 6.9 | 20.0 | ..... | ..... | ..... | ..... | ..... |
| | 1137 | 14.2 | 14.37 | 13.40 | 4.8 | 18.2 | ..... | ..... | ..... | ..... | ..... |
| | 1138 | 23.8 | 13.97 | 13.00 | 4.1 | 17.1 | ..... | ..... | ..... | ..... | ..... |
| | 1139 | 32.0 | 13.27 | 12.30 | − 0.9 | 11.4 | ..... | ..... | ..... | ..... | ..... |
| | 1140 | 35.9 | 12.37 | 11.40 | −15.5 | − 4.1 | ..... | ..... | ..... | ..... | ..... |
| | 1141 | 40.1 | 11.47 | 10.50 | −19.2 | − 8.7 | ..... | ..... | ..... | ..... | ..... |
| | 1142 | −17.6 | 14.67 | 13.70 | −23.2 | − 9.5 | ..... | ..... | ..... | ..... | ..... |
| | 1143 | −22.1 | 14.27 | 13.30 | −27.4 | −14.1 | ..... | ..... | ..... | ..... | ..... |
| | 1144 | −21.4 | 14.77 | 13.80 | −31.7 | −17.9 | ..... | ..... | ..... | ..... | ..... |
| | 1146 | −13.7 | 14.77 | 13.80 | −35.1 | −21.3 | ..... | ..... | ..... | ..... | ..... |
| | 1147 | −14.4 | 14.37 | 13.40 | −39.5 | −26.1 | ..... | ..... | ..... | ..... | ..... |
| | 1148 | 9.3 | 14.77 | 13.80 | −42.0 | −28.2 | ..... | ..... | ..... | ..... | ..... |

TABLE I—*Continued*

| Plate Number and Date | Number | Latitude | Diurnal Motion | | Longitudes on Days of Observation | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sidereal | Synodic | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1234 (*cont.*) | 1149 | 15°5 | 14°37 | 13°40 | −40°9 | −27°5 | ..... | ..... | ..... | ..... | ..... |
| | 1150 | 13.9 | 13.87 | 12.90 | −44.5 | −31.6 | ..... | ..... | ..... | ..... | ..... |
| | 1151 | 11.2 | 14.47 | 13.50 | −45.1 | −31.6 | ..... | ..... | ..... | ..... | ..... |
| | 1152 | 13.3 | 14.37 | 13.40 | −47.5 | −34.1 | ..... | ..... | ..... | ..... | ..... |
| | 1153 | −21.7 | 13.87 | 12.90 | −13.0 | − 0.1 | ..... | ..... | ..... | ..... | ..... |
| | 1154 | −21.4 | 12.57 | 11.60 | − 8.0 | 3.6 | ..... | ..... | ..... | ..... | ..... |
| 1244 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Aug. 26, '04 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| $8^h42^m$ | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 1266 | 1155 | −28.0 | 14.73 | 13.75 | 5.1 | 18.2 | ..... | ..... | ..... | ..... | ..... |
| Sept. 9, '04 | 1156 | −26.6 | 14.63 | 13.65 | 0.9 | 13.9 | ..... | ..... | ..... | ..... | ..... |
| $10^h35^m$ | 1157 | −25.2 | 13.47 | 12.49 | − 2.1 | 9.8 | ..... | ..... | ..... | ..... | ..... |
| | 1158 | −21.7 | 14.10 | 13.12 | 0.0 | 12.5 | ..... | ..... | ..... | ..... | ..... |
| | 1159 | −18.9 | 14.20 | 13.22 | − 2.6 | 10.0 | ..... | ..... | ..... | ..... | ..... |
| | 1160 | −18.4 | 14.84 | 13.86 | − 9.4 | 3.8 | ..... | ..... | ..... | ..... | ..... |
| | 1161 | −18.7 | 14.73 | 13.75 | − 5.3 | 7.8 | ..... | ..... | ..... | ..... | ..... |
| | 1162 | −13.1 | 13.89 | 12.91 | 13.5 | 25.8 | ..... | ..... | ..... | ..... | ..... |
| | 1163 | −21.5 | 12.74 | 11.76 | 23.9 | 35.1 | ..... | ..... | ..... | ..... | ..... |
| | 1164 | −10.4 | 14.84 | 13.86 | 24.1 | 37.3 | ..... | ..... | ..... | ..... | ..... |
| | 1165 | − 6.8 | 14.20 | 13.22 | 29.3 | 41.9 | ..... | ..... | ..... | ..... | ..... |
| | 1166 | −10.6 | 13.78 | 12.80 | 30.8 | 43.0 | ..... | ..... | ..... | ..... | ..... |
| | 1167 | −12.1 | 14.73 | 13.75 | 6.0 | 19.1 | ..... | ..... | ..... | ..... | ..... |
| | 1168 | −10.4 | 15.04 | 14.06 | 7.4 | 20.8 | ..... | ..... | ..... | ..... | ..... |
| | 1169 | −17.1 | 14.42 | 13.44 | 2.5 | 15.3 | ..... | ..... | ..... | ..... | ..... |
| | 1170 | 12.4 | 15.57 | 14.59 | 28.0 | 41.9 | ..... | ..... | ..... | ..... | ..... |
| | 1171 | 17.7 | 14.52 | 13.54 | 30.0 | 42.9 | ..... | ..... | ..... | ..... | ..... |
| | 1172 | 19.9 | 13.78 | 12.80 | 33.8 | 46.0 | ..... | ..... | ..... | ..... | ..... |
| | 1173 | 17.7 | 13.99 | 13.01 | 33.6 | 46.0 | ..... | ..... | ..... | ..... | ..... |
| | 1174 | 13.9 | 14.52 | 13.54 | 33.9 | 46.8 | ..... | ..... | ..... | ..... | ..... |
| | 1175 | 17.8 | 14.52 | 13.54 | 21.3 | 34.2 | ..... | ..... | ..... | ..... | ..... |
| | 1176 | 19.8 | 14.63 | 13.65 | 20.5 | 33.5 | ..... | ..... | ..... | ..... | ..... |
| | 1177 | 17.0 | 13.47 | 12.49 | 15.2 | 27.1 | ..... | ..... | ..... | ..... | ..... |
| | 1178 | 16.9 | 14.20 | 13.22 | 11.7 | 24.3 | ..... | ..... | ..... | ..... | ..... |
| | 1179 | − 3.3 | 13.99 | 13.01 | 23.8 | 36.2 | ..... | ..... | ..... | ..... | ..... |
| | 1180 | −29.6 | 14.52 | 13.54 | −15.1 | − 2.2 | ..... | ..... | ..... | ..... | ..... |
| | 1181 | −27.9 | 14.20 | 13.22 | −29.5 | −16.9 | ..... | ..... | ..... | ..... | ..... |
| | 1182 | −32.0 | 14.42 | 13.44 | −31.8 | −19.0 | ..... | ..... | ..... | ..... | ..... |
| | 1183 | −32.3 | 14.31 | 13.33 | −35.0 | −22.3 | ..... | ..... | ..... | ..... | ..... |
| | 1184 | −28.5 | 14.94 | 13.96 | −38.9 | −25.6 | ..... | ..... | ..... | ..... | ..... |
| | 1185 | −28.3 | 13.99 | 13.01 | −36.0 | −23.6 | ..... | ..... | ..... | ..... | ..... |
| | 1186 | − 7.0 | 16.09 | 15.11 | −38.2 | −23.8 | ..... | ..... | ..... | ..... | ..... |
| | 1187 | 24.4 | 15.78 | 14.80 | 32.4 | 46.5 | ..... | ..... | ..... | ..... | ..... |
| | 1188 | 26.5 | 13.78 | 12.80 | 27.8 | 40.0 | ..... | ..... | ..... | ..... | ..... |
| 1270 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Sept. 10, '04 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| $9^h27^m$ | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 1294 | 1190 | 11.9 | 14.52 | 13.53 | −33.0 | ..... | − 8°3 | ..... | 20°4 | ..... | ..... |
| Sept. 29, '04 | 1191 | −18.5 | 14.73 | 13.74 | 13.5 | ..... | 39.7 | ..... | ..... | ..... | ..... |
| $11^h26^m5$ | 1192 | −25.4 | 14.10 | 13.11 | 12.3 | ..... | 37.3 | ..... | ..... | ..... | ..... |
| | 1193 | 12.1 | 13.89 | 12.90 | −29.8 | ..... | − 5.2 | ..... | ..... | ..... | ..... |
| | 1194 | 30.7 | 13.21 | 12.22 | 25.0 | ..... | 48.3 | ..... | ..... | ..... | ..... |
| | 1195 | 31.8 | 13.58 | 12.59 | 22.7 | ..... | 46.7 | ..... | ..... | ..... | ..... |
| | 1196 | 20.9 | 13.94 | 12.95 | 29.2 | ..... | 48.9 | ..... | ..... | ..... | ..... |
| | 1197 | −20.0 | 14.42 | 13.43 | 16.5 | ..... | 42.1 | ..... | ..... | ..... | ..... |
| | 1198 | −20.5 | 14.25 | 13.26 | 20.4 | ..... | 45.7 | ..... | ..... | ..... | ..... |
| | 1199 | 14.2 | 13.74 | 12.75 | −45.6 | ..... | −21.3 | ..... | ..... | ..... | ..... |
| | 1200 | −17.3 | 13.52 | 12.53 | − 6.0 | ..... | 17.9 | ..... | ..... | ..... | ..... |
| 1295 | 1201 | −25.8 | 15.01 | 14.02 | −23.8 | ..... | 4.8 | ..... | ..... | ..... | ..... |
| Oct. 1' 04 | 1202 | −24.4 | 14.95 | 13.96 | −26.4 | ..... | 2.1 | ..... | ..... | ..... | ..... |
| $9^h12^m5$ | 1203 | −25.4 | 14.76 | 13.77 | −27.1 | ..... | 1.0 | ..... | ..... | ..... | ..... |
| | 1204 | −21.0 | 14.95 | 13.96 | −25.4 | ..... | 3.1 | ..... | ..... | ..... | ..... |

TABLE I—*Continued*

| Plate Number and Date | Number | Latitude | Diurnal Motion | | Longitudes on Days of Observation | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sidereal | Synodic | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1295 (*cont.*) | 1205 | −26°3 | 13°88 | 12°89 | −32°3 | ..... | − 6°0 | ..... | ..... | ..... | ..... |
| | 1206 | −24.5 | 13.83 | 12.84 | −34.2 | ..... | − 8.0 | ..... | ..... | ..... | ..... |
| | 1207 | 14.6 | 14.02 | 13.03 | −35.5 | ..... | − 8.9 | ..... | ..... | ..... | ..... |
| | 1208 | 16.4 | 12.90 | 11.91 | −37.8 | ..... | −13.5 | ..... | ..... | ..... | ..... |
| | 1209 | 19.2 | 13.44 | 12.45 | −40.5 | ..... | −15.1 | ..... | ..... | ..... | ..... |
| 1301 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Oct. 3, '04 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| $10^h11^m$ | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 1311 | 1211 | 14.2 | 14.65 | 13.66 | 30.2 | 43°8 | ..... | ..... | ..... | ..... | ..... |
| Oct. 6, '04 | 1212 | 15.5 | 14.35 | 13.36 | 31.8 | 45.1 | ..... | ..... | ..... | ..... | ..... |
| $9^h39^m$ | 1213 | 16.2 | 14.45 | 13.46 | 29.9 | 43.3 | ..... | ..... | ..... | ..... | ..... |
| | 1214 | 18.4 | 14.45 | 13.46 | 32.0 | 45.4 | ..... | ..... | ..... | ..... | ..... |
| | 1215 | 17.6 | 15.05 | 14.06 | 27.9 | 41.9 | ..... | ..... | ..... | ..... | ..... |
| | 1216 | 18.9 | 15.65 | 14.66 | 25.3 | 39.9 | ..... | ..... | ..... | ..... | ..... |
| | 1217 | 16.8 | 13.84 | 12.85 | 25.3 | 38.1 | ..... | ..... | ..... | ..... | ..... |
| | 1218 | 19.3 | 13.84 | 12.85 | 24.0 | 36.8 | ..... | ..... | ..... | ..... | ..... |
| | 1219 | 21.1 | 14.65 | 13.66 | 25.8 | 39.4 | ..... | ..... | ..... | ..... | ..... |
| | 1220 | 21.6 | 14.75 | 13.76 | 21.2 | 34.9 | ..... | ..... | ..... | ..... | ..... |
| | 1221 | 16.1 | 15.75 | 14.76 | 16.5 | 31.2 | ..... | ..... | ..... | ..... | ..... |
| | 1222 | 21.8 | 14.35 | 13.36 | 7.9 | 21.2 | ..... | ..... | ..... | ..... | ..... |
| | 1223 | −19.4 | 14.55 | 13.56 | 29.0 | 42.5 | ..... | ..... | ..... | ..... | ..... |
| | 1224 | −16.9 | 14.15 | 13.16 | 31.2 | 44.3 | ..... | ..... | ..... | ..... | ..... |
| | 1225 | −16.5 | 13.64 | 12.65 | 15.1 | 27.7 | ..... | ..... | ..... | ..... | ..... |
| | 1226 | −15.1 | 15.05 | 14.06 | 16.4 | 30.4 | ..... | ..... | ..... | ..... | ..... |
| | 1227 | −18.1 | 13.74 | 12.75 | 18.0 | 30.7 | ..... | ..... | ..... | ..... | ..... |
| | 1228 | −20.9 | 14.75 | 13.76 | 14.0 | 27.7 | ..... | ..... | ..... | ..... | ..... |
| | 1229 | −22.3 | 14.35 | 13.36 | 11.5 | 24.8 | ..... | ..... | ..... | ..... | ..... |
| | 1230 | −14.7 | 13.84 | 12.85 | 13.7 | 26.5 | ..... | ..... | ..... | ..... | ..... |
| | 1231 | −22.5 | 14.15 | 13.16 | 4.7 | 17.8 | ..... | ..... | ..... | ..... | ..... |
| | 1232 | −20.5 | 13.34 | 12.35 | 4.5 | 16.8 | ..... | ..... | ..... | ..... | ..... |
| | 1233 | −23.5 | 13.14 | 12.15 | 0.0 | 12.1 | ..... | ..... | ..... | ..... | ..... |
| | 1234 | 25.2 | 14.75 | 13.76 | − 9.2 | 4.5 | ..... | ..... | ..... | ..... | ..... |
| | 1235 | 22.7 | 14.35 | 13.36 | − 6.0 | 7.3 | ..... | ..... | ..... | ..... | ..... |
| | 1236 | 20.8 | 13.44 | 12.45 | −14.7 | − 2.3 | ..... | ..... | ..... | ..... | ..... |
| | 1237 | 25.4 | 14.45 | 13.46 | −15.9 | − 2.5 | ..... | ..... | ..... | ..... | ..... |
| | 1238 | − 9.0 | 14.35 | 13.36 | 7.6 | 20.9 | ..... | ..... | ..... | ..... | ..... |
| | 1239 | 21.3 | 13.84 | 12.85 | −10.8 | 2.0 | ..... | ..... | ..... | ..... | ..... |
| | 1240 | 17.4 | 14.35 | 13.36 | 7.9 | 21.2 | ..... | ..... | ..... | ..... | ..... |
| | 1241 | −15.1 | 13.24 | 12.25 | − 4.2 | 8.0 | ..... | ..... | ..... | ..... | ..... |
| | 1242 | −12.8 | 14.95 | 13.96 | − 2.0 | 11.9 | ..... | ..... | ..... | ..... | ..... |
| | 1243 | −17.2 | 15.05 | 14.06 | −11.4 | 2.6 | ..... | ..... | ..... | ..... | ..... |
| 1314 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Oct. 7, '04 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| $9^h33^m$ | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 1318 | 1245 | 13.8 | 13.69 | 12.70 | 18.5 | ..... | 44.1 | ..... | ..... | ..... | ..... |
| Oct. 15, '04 | 1246 | 19.1 | 14.43 | 13.44 | − 4.8 | ..... | 22.3 | ..... | ..... | ..... | ..... |
| $9^h22^m$ | 1247 | 17.4 | 14.27 | 13.28 | − 8.3 | ..... | 18.5 | ..... | ..... | ..... | ..... |
| | 1248 | 24.0 | 14.31 | 13.32 | −11.1 | ..... | 16.3 | 29°0 | ..... | ..... | ..... |
| | 1249 | 22.8 | 14.33 | 13.34 | −13.7 | ..... | 13.5 | 26.5 | ..... | ..... | ..... |
| | 1250 | 13.0 | 14.53 | 13.54 | −20.5 | ..... | 6.4 | 20.5 | ..... | ..... | ..... |
| | 1251 | 15.6 | 13.94 | 12.95 | −22.1 | ..... | 4.1 | 17.0 | ..... | ..... | ..... |
| | 1252 | 17.1 | 14.08 | 13.09 | −20.1 | ..... | 6.0 | 19.5 | ..... | ..... | ..... |
| | 1253 | 18.9 | 14.11 | 13.12 | −19.7 | ..... | 6.8 | 19.9 | ..... | ..... | ..... |
| | 1254 | 18.0 | 14.33 | 13.34 | −36.1 | ..... | − 9.2 | ..... | ..... | ..... | ..... |
| | 1255 | 21.2 | 14.01 | 13.02 | −24.2 | ..... | 2.1 | 15.1 | ..... | ..... | ..... |
| | 1256 | −24.7 | 14.98 | 13.99 | − 4.9 | ..... | 21.9 | 37.7 | ..... | ..... | ..... |
| | 1257 | −21.2 | 14.56 | 13.57 | − 9.1 | ..... | 18.2 | 31.9 | ..... | ..... | ..... |
| | 1258 | −17.2 | 14.07 | 13.08 | −12.0 | ..... | 13.9 | 27.6 | ..... | ..... | ..... |
| | 1259 | −17.3 | 14.16 | 13.17 | −15.5 | ..... | 11.0 | 24.3 | ..... | ..... | ..... |
| | 1260 | −19.8 | 14.07 | 13.08 | −19.3 | ..... | 6.7 | 20.3 | ..... | ..... | ..... |
| | 1261 | −24.5 | 13.99 | 13.00 | −26.6 | ..... | − 0.1 | 12.6 | ..... | ..... | ..... |
| | 1262 | −24.0 | 14.19 | 13.20 | −29.8 | ..... | − 2.6 | 9.9 | ..... | ..... | ..... |

TABLE I—*Continued*

| Plate Number and Date | Number | Latitude | Diurnal Motion | | Longitudes on Days of Observation | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sidereal | Synodic | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1318 (*cont.*) | 1263 | −18°.8 | 14°.34 | 13°.35 | −35°.1 | ..... | − 7°.8 | 5°.1 | ..... | ..... | ..... |
| | 1264 | −20.5 | 14.40 | 13.41 | −36.0 | ..... | − 9.2 | 4.6 | ..... | ..... | ..... |
| | 1265 | −25.8 | 14.24 | 13.25 | −40.0 | ..... | −13.3 | 0.0 | ..... | ..... | ..... |
| 1324 | 1266 | −22.6 | 14.05 | 13.06 | 1.1 | 14°.2 | ..... | ..... | ..... | ..... | ..... |
| Oct. 17, '04 | 1267 | −25.7 | 14.85 | 13.86 | 1.2 | 15.1 | ..... | ..... | ..... | ..... | ..... |
| 9h46m | 1268 | −24.8 | 16.35 | 15.36 | 19.4 | 34.8 | ..... | ..... | ..... | ..... | ..... |
| | 1269 | −24.4 | 15.75 | 14.76 | 17.0 | 31.8 | ..... | ..... | ..... | ..... | ..... |
| | 1270 | 25.2 | 13.85 | 12.86 | − 5.9 | 7.0 | ..... | ..... | ..... | ..... | ..... |
| | 1271 | 25.0 | 13.95 | 12.96 | −10.7 | 2.3 | ..... | ..... | ..... | ..... | ..... |
| | 1272 | 17.6 | 13.95 | 12.96 | −18.5 | − 5.5 | ..... | ..... | ..... | ..... | ..... |
| | 1273 | 18.2 | 14.95 | 13.96 | −23.1 | − 9.1 | ..... | ..... | ..... | ..... | ..... |
| | 1275 | −30.0 | 14.25 | 13.26 | −13.8 | − 0.5 | ..... | ..... | ..... | ..... | ..... |
| | 1276 | −28.2 | 13.85 | 12.86 | −16.0 | − 3.1 | ..... | ..... | ..... | ..... | ..... |
| | 1277 | −33.8 | 14.25 | 13.26 | −16.1 | − 2.8 | ..... | ..... | ..... | ..... | ..... |
| | 1278 | −33.0 | 14.05 | 13.06 | −17.9 | − 4.8 | ..... | ..... | ..... | ..... | ..... |
| | 1279 | −25.9 | 14.65 | 13.66 | −22.8 | − 9.1 | ..... | ..... | ..... | ..... | ..... |
| | 1280 | −22.3 | 15.65 | 14.66 | −26.9 | −12.2 | ..... | ..... | ..... | ..... | ..... |
| | 1281 | −21.3 | 14.65 | 13.66 | −22.2 | − 8.5 | ..... | ..... | ..... | ..... | ..... |
| | 1282 | −18.3 | 14.95 | 13.96 | −29.7 | −15.7 | ..... | ..... | ..... | ..... | ..... |
| | 1283 | −13.8 | 13.85 | 12.86 | −24.0 | −11.1 | ..... | ..... | ..... | ..... | ..... |
| | 1284 | −22.9 | 14.65 | 13.66 | −34.6 | −20.9 | ..... | ..... | ..... | ..... | ..... |
| | 1285 | −20.0 | 14.25 | 13.26 | −38.0 | −24.7 | ..... | ..... | ..... | ..... | ..... |
| | 1286 | −23.7 | 13.55 | 12.56 | −39.2 | −26.6 | ..... | ..... | ..... | ..... | ..... |
| 1329 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Oct. 18, '04 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 9h50m | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 1336 | 1287 | −18.9 | 14.17 | 13.17 | 31.0 | 44.3 | ..... | ..... | ..... | ..... | ..... |
| Oct. 26, '04 | 1288 | −15.0 | 15.06 | 14.06 | 31.4 | 40.6 | ..... | ..... | ..... | ..... | ..... |
| 9h41m | 1289 | −16.3 | 14.27 | 13.27 | 20.1 | 33.5 | ..... | ..... | ..... | ..... | ..... |
| | 1290 | −22.8 | 14.47 | 13.47 | 21.3 | 34.9 | ..... | ..... | ..... | ..... | ..... |
| | 1291 | −24.7 | 13.59 | 12.59 | 20.3 | 32.9 | 45.5 | ..... | ..... | ..... | ..... |
| | 1292 | −25.5 | 13.94 | 12.94 | 18.2 | 31.0 | 44.1 | ..... | ..... | ..... | ..... |
| | 1293 | −28.8 | 13.44 | 12.44 | 22.2 | 34.6 | 47.1 | ..... | ..... | ..... | ..... |
| | 1294 | −22.8 | 14.03 | 13.03 | 12.1 | 24.9 | 38.2 | ..... | ..... | ..... | ..... |
| | 1295 | −22.9 | 14.08 | 13.08 | 9.3 | 22.0 | 35.5 | ..... | ..... | ..... | ..... |
| | 1296 | −26.1 | 13.74 | 12.74 | 8.4 | 21.8 | 30.9 | ..... | ..... | ..... | ..... |
| | 1297 | −27.9 | 14.27 | 13.27 | 5.1 | 18.5 | ..... | ..... | ..... | ..... | ..... |
| | 1298 | −26.8 | 14.43 | 13.43 | 2.1 | 15.0 | 28.9 | 42.3 | ..... | ..... | ..... |
| | 1299 | −28.0 | 13.66 | 12.66 | − 0.8 | 11.1 | 24.2 | 37.1 | ..... | ..... | ..... |
| | 1300 | −22.7 | 13.18 | 12.18 | − 1.0 | 11.3 | ..... | ..... | ..... | ..... | ..... |
| | 1301 | −16.4 | 13.92 | 12.92 | 9.6 | 21.1 | 35.4 | ..... | ..... | ..... | ..... |
| | 1302 | −15.5 | 13.97 | 12.97 | 12.9 | 26.0 | ..... | ..... | ..... | ..... | ..... |
| | 1303 | −17.1 | 15.26 | 14.26 | 15.3 | 29.7 | ..... | ..... | ..... | ..... | ..... |
| | 1304 | −33.0 | 13.97 | 12.97 | −11.1 | 2.0 | ..... | ..... | ..... | ..... | ..... |
| | 1305 | 12.0 | 14.79 | 13.79 | 15.6 | 29.9 | 43.2 | ..... | ..... | ..... | ..... |
| | 1306 | 15.1 | 14.74 | 13.74 | 19.8 | 34.1 | 47.3 | ..... | ..... | ..... | ..... |
| | 1307 | 32.8 | 13.84 | 12.84 | 15.5 | 28.3 | 41.2 | ..... | ..... | ..... | ..... |
| | 1308 | −30.8 | 13.74 | 12.74 | −15.3 | − 2.6 | 10.2 | ..... | ..... | ..... | ..... |
| | 1309 | 34.2 | 14.09 | 13.09 | 18.9 | 32.0 | 45.1 | ..... | ..... | ..... | ..... |
| | 1310 | 33.1 | 13.97 | 12.97 | 23.8 | 36.9 | ..... | ..... | ..... | ..... | ..... |
| | 1311 | 28.5 | 13.97 | 12.97 | 8.4 | 21.5 | ..... | ..... | ..... | ..... | ..... |
| | 1312 | 30.6 | 13.32 | 12.32 | 11.5 | 24.3 | 36.0 | 48.7 | ..... | ..... | ..... |
| | 1313 | 32.7 | 13.05 | 12.05 | 5.9 | 18.5 | 30.2 | 42.2 | ..... | ..... | ..... |
| | 1314 | 40.2 | 12.88 | 11.88 | 8.6 | 20.6 | ..... | ..... | ..... | ..... | ..... |
| | 1315 | 47.5 | 11.70 | 10.70 | 18.2 | 29.0 | ..... | ..... | ..... | ..... | ..... |
| | 1316 | 45.7 | 11.89 | 10.89 | 22.5 | 33.5 | ..... | ..... | ..... | ..... | ..... |
| | 1317 | 31.8 | 13.17 | 12.17 | 0.9 | 13.6 | 25.3 | 37.6 | ..... | ..... | ..... |
| | 1318 | 7.1 | 15.16 | 14.16 | 0.8 | 15.1 | ..... | ..... | ..... | ..... | ..... |
| | 1319 | 7.3 | 13.97 | 12.97 | − 1.0 | 12.1 | ..... | ..... | ..... | ..... | ..... |
| | 1320 | 13.8 | 14.29 | 13.29 | −12.7 | 0.5 | 13.5 | 27.3 | ..... | ..... | ..... |
| | 1321 | 12.6 | 14.23 | 13.23 | −10.5 | 3.2 | 16.0 | ..... | ..... | ..... | ..... |
| | 1323 | 9.5 | 13.69 | 12.69 | 6.1 | 18.6 | 31.5 | ..... | ..... | ..... | ..... |
| | 1324 | 13.1 | 14.44 | 13.44 | 5.0 | 19.0 | 31.9 | ..... | ..... | ..... | ..... |
| | 1325 | 11.7 | 14.24 | 13.24 | −28.4 | −14.7 | − 1.3 | 11.3 | ..... | ..... | ..... |

TABLE I—*Continued*

| Plate Number and Date | Number | Latitude | Diurnal Motion | | Longitudes on Days of Observation | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sidereal | Synodic | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1336 (*cont.*) | 1326 | 8°.2 | 15°.06 | 14°.06 | −25°.9 | −11°.7 | ..... | ..... | ..... | ..... | ..... |
| | 1327 | 8.1 | 15.26 | 14.06 | −30.6 | −16.2 | ..... | ..... | ..... | ..... | ..... |
| | 1328 | 3.7 | 14.79 | 13.79 | 22.2 | 37.2 | 49°.8 | ..... | ..... | ..... | ..... |
| | 1329 | 10.9 | 14.56 | 13.56 | −11.6 | 1.8 | 15.5 | 29°.1 | ..... | ..... | ..... |
| 1344 | 1330 | −29.4 | 14.10 | 13.10 | 7.2 | 20.2 | ..... | ..... | ..... | ..... | ..... |
| Oct. 27, '04 | 1331 | 35.9 | 12.19 | 11.19 | 26.9 | 38.0 | ..... | ..... | ..... | ..... | ..... |
| $9^h55^m$ | 1332 | 9.4 | 13.77 | 12.77 | 12.2 | 24.2 | 37.7 | ..... | ..... | ..... | ..... |
| | 1334 | −24.0 | 13.42 | 12.42 | −36.7 | −24.9 | −11.9 | ..... | ..... | ..... | ..... |
| | 1335 | −24.6 | 13.82 | 12.82 | −42.5 | −29.8 | −16.9 | ..... | ..... | ..... | ..... |
| | 1336 | 12.6 | 13.97 | 12.97 | −41.1 | −28.1 | −15.2 | ..... | ..... | ..... | ..... |
| | 1337 | 12.7 | 14.27 | 13.27 | −37.9 | −24.7 | −11.4 | ..... | ..... | ..... | ..... |
| | 1338 | 38.5 | 13.30 | 12.30 | − 8.0 | 4.2 | ..... | ..... | ..... | ..... | ..... |
| | 1339 | 32.5 | 11.98 | 10.98 | −19.3 | − 8.4 | ..... | ..... | ..... | ..... | ..... |
| | 1340 | 10.2 | 14.17 | 13.17 | 21.5 | 34.4 | 47.8 | ..... | ..... | ..... | ..... |
| 1348 | 1333 | −31.0 | 13.35 | 12.35 | −22.5 | −10.1 | ..... | ..... | ..... | ..... | ..... |
| Oct. 28, '04 | 1341 | 8.5 | 14.64 | 13.64 | 28.2 | 41.9 | ..... | ..... | ..... | ..... | ..... |
| $9^h44^m$ | 1342 | 12.8 | 14.24 | 13.24 | − 8.9 | 4.4 | ..... | ..... | ..... | ..... | ..... |
| | 1344 | 20.9 | 13.95 | 12.95 | −26.0 | −13.0 | ..... | ..... | ..... | ..... | ..... |
| | 1345 | 18.0 | 13.85 | 12.85 | −11.1 | 1.8 | ..... | ..... | ..... | ..... | ..... |
| | 1346 | −14.0 | 14.32 | 13.32 | −36.5 | −23.1 | ..... | ..... | 17°.0 | 30°.5 | 43°.0 |
| | 1347 | −10.6 | 15.24 | 14.24 | −40.2 | −25.9 | ..... | ..... | ..... | ..... | ..... |
| | 1348 | 13.9 | 14.26 | 13.26 | −38.3 | −25.2 | ..... | ..... | 14.6 | 28.0 | 41.0 |
| | 1349 | 10.1 | 14.20 | 13.20 | −40.7 | −26.9 | ..... | ..... | 13.1 | 26.1 | 38.0 |
| | 1350 | 14.9 | 14.55 | 13.55 | −41.2 | −27.7 | ..... | ..... | 13.2 | 26.5 | 39.9 |
| | 1351 | 18.6 | 13.65 | 12.65 | −40.9 | −28.2 | ..... | ..... | ..... | ..... | ..... |
| | 1352 | −33.8 | 13.45 | 12.45 | 19.4 | 31.9 | ..... | ..... | ..... | ..... | ..... |
| | 1353 | −38.2 | 12.05 | 11.05 | 2.1 | 13.2 | ..... | ..... | ..... | ..... | ..... |
| | 1354 | 8.0 | 13.05 | 12.05 | 18.1 | 30.2 | ..... | ..... | ..... | ..... | ..... |
| 1354 | 1355 | −17.4 | 14.26 | 13.26 | −38.6 | ..... | ..... | 1.9 | 15.0 | ..... | ..... |
| Oct. 29, '04 | 1356 | 12.3 | 14.40 | 13.40 | −30.4 | ..... | ..... | 9.9 | 23.5 | 36.2 | ..... |
| $9^h50^m$ | 1357 | 17.3 | 14.15 | 13.15 | −37.5 | ..... | ..... | 2.5 | 15.7 | ..... | ..... |
| | 1358 | 17.1 | 14.37 | 13.37 | −34.9 | ..... | ..... | 4.6 | 17.9 | 31.5 | 45.3 |
| | 1359 | 21.9 | 13.94 | 12.94 | −45.1 | ..... | ..... | − 6.0 | 6.2 | 19.8 | 33.7 |
| | 1360 | 22.4 | 14.15 | 13.15 | −43.8 | ..... | ..... | − 4.4 | 8.9 | ..... | ..... |
| 1362 | 1361 | 19.9 | 14.08 | 13.08 | 3.9 | 16.5 | 29.5 | 42.9 | ..... | ..... | ..... |
| Nov. 1, '04 | 1362 | 22.2 | 14.52 | 13.52 | 7.0 | 20.5 | 33.7 | ..... | ..... | ..... | ..... |
| $10^h00^m$ | 1363 | 25.0 | 13.44 | 12.44 | 7.7 | 20.1 | ..... | ..... | ..... | ..... | ..... |
| | 1364 | 20.2 | 12.64 | 11.64 | 11.5 | 23.1 | ..... | ..... | ..... | ..... | ..... |
| | 1365 | 23.7 | 15.08 | 14.08 | 13.1 | 27.1 | 40.9 | ..... | ..... | ..... | ..... |
| | 1366 | 18.2 | 14.46 | 13.46 | − 0.4 | 12.9 | 26.1 | 39.8 | ..... | ..... | ..... |
| | 1367 | 17.3 | 14.11 | 13.11 | − 4.0 | 9.0 | 21.7 | 35.2 | ..... | ..... | ..... |
| | 1368 | 19.4 | 14.26 | 13.26 | − 2.0 | 10.7 | 23.7 | 37.6 | ..... | ..... | ..... |
| | 1369 | 21.2 | 13.74 | 12.74 | − 1.6 | 11.1 | ..... | ..... | ..... | ..... | ..... |
| | 1370 | 17.3 | 14.52 | 13.52 | − 6.9 | 5.4 | 19.8 | ..... | ..... | ..... | ..... |
| | 1371 | 22.6 | 14.21 | 13.21 | − 9.0 | 3.8 | 16.9 | 30.4 | ..... | ..... | ..... |
| | 1372 | 23.3 | 13.81 | 12.81 | −11.1 | 1.8 | 14.2 | ..... | ..... | ..... | ..... |
| | 1373 | 25.9 | 13.76 | 12.76 | − 9.2 | 3.7 | 16.3 | 28.9 | ..... | ..... | ..... |
| | 1374 | −18.8 | 14.26 | 13.26 | − 2.2 | 11.0 | 24.0 | 37.4 | ..... | ..... | ..... |
| | 1375 | −13.2 | 14.45 | 13.45 | − 1.8 | 11.6 | ..... | ..... | ..... | ..... | ..... |
| | 1376 | −12.8 | 14.45 | 13.45 | − 9.2 | 3.9 | 17.0 | 31.0 | ..... | ..... | ..... |
| | 1377 | −15.8 | 14.17 | 13.17 | −15.7 | − 2.5 | 10.2 | 23.7 | ..... | ..... | ..... |
| | 1378 | −17.5 | 14.53 | 13.53 | −18.9 | − 5.6 | 7.7 | 21.5 | ..... | ..... | ..... |
| | 1379 | −19.3 | 14.41 | 13.41 | −17.0 | − 3.5 | 9.5 | 23.1 | ..... | ..... | ..... |
| | 1380 | −17.7 | 14.80 | 13.80 | −12.7 | 0.0 | 14.2 | 28.7 | ..... | ..... | ..... |
| | 1381 | −20.5 | 14.32 | 13.32 | −12.3 | 1.4 | 14.0 | ..... | ..... | ..... | ..... |
| | 1382 | −19.2 | 14.53 | 13.53 | − 9.9 | 3.6 | 16.6 | 30.6 | ..... | ..... | ..... |
| | 1383 | −21.5 | 14.26 | 13.26 | −18.0 | − 4.6 | 8.1 | 21.7 | ..... | ..... | ..... |
| | 1384 | −20.6 | 14.10 | 13.10 | −24.1 | −10.9 | 1.7 | 15.1 | ..... | ..... | ..... |
| | 1385 | 28.4 | 13.66 | 12.66 | −32.5 | −20.1 | − 7.3 | 5.2 | ..... | ..... | ..... |
| | 1386 | 25.3 | 13.84 | 12.84 | −29.5 | −16.7 | ..... | ..... | ..... | ..... | ..... |
| | 1387 | 24.2 | 14.21 | 13.21 | −33.0 | −19.9 | − 7.4 | 6.6 | ..... | ..... | ..... |
| | 1388 | 22.9 | 13.62 | 12.62 | −37.5 | −24.9 | −11.9 | 0.0 | ..... | ..... | ..... |
| | 1389 | 21.3 | 14.33 | 13.33 | −29.9 | −17.4 | − 4.0 | 9.8 | ..... | ..... | ..... |
| | 1390 | 20.2 | 13.84 | 12.84 | −30.8 | −18.0 | ..... | ..... | ..... | ..... | ..... |
| | 1391 | 24.6 | 14.29 | 13.29 | −25.7 | −13.3 | 0.0 | 13.9 | ..... | ..... | ..... |

TABLE I—*Continued*

| Plate Number and Date | Number | Latitude | Diurnal Motion | | Longitudes on Days of Observation | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sidereal | Synodic | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1366 | 1392 | 7°.6 | 14°.31 | 13°.31 | −32°.5 | −20°.0 | − 6°.0 | ..... | ..... | ..... | ..... |
| Nov. 2, '04 | 1393 | −19.4 | 14.19 | 13.19 | −32.9 | −20.0 | ..... | ..... | ..... | ..... | ..... |
| $9^h55^m$ | 1394 | −15.4 | 14.36 | 13.36 | 3.5 | 16.1 | 30.1 | ..... | ..... | ..... | ..... |
| 1370 | 1395 | 17.7 | 14.51 | 13.51 | 28.2 | 41.9 | ..... | ..... | ..... | ..... | ..... |
| Nov. 3, '04 | 1396 | 18.2 | 14.12 | 13.12 | 30.2 | 43.5 | ..... | ..... | ..... | ..... | ..... |
| $9^h23^m$ | 1397 | 19.2 | 14.12 | 13.12 | 19.9 | 33.2 | ..... | ..... | ..... | ..... | ..... |
| | 1399 | −20.4 | 14.51 | 13.51 | 18.2 | 31.9 | ..... | ..... | ..... | ..... | ..... |
| | 1400 | −20.0 | 14.22 | 13.22 | 27.2 | 40.6 | ..... | ..... | ..... | ..... | ..... |
| | 1401 | −16.9 | 14.51 | 13.51 | 11.5 | 25.2 | ..... | ..... | ..... | ..... | ..... |
| | 1402 | −25.8 | 14.61 | 13.61 | 4.7 | 18.5 | ..... | ..... | ..... | ..... | ..... |
| | 1404 | −23.8 | 14.12 | 13.12 | 9.4 | 22.7 | ..... | ..... | ..... | ..... | ..... |
| | 1405 | −26.1 | 14.61 | 13.61 | 22.1 | 35.9 | ..... | ..... | ..... | ..... | ..... |
| | 1406 | −16.0 | 14.32 | 13.32 | −44.3 | −30.8 | ..... | ..... | ..... | ..... | ..... |
| | 1407 | −13.6 | 15.40 | 14.40 | −46.7 | −32.1 | ..... | ..... | ..... | ..... | ..... |
| | 1408 | − 7.1 | 14.91 | 13.91 | −49.5 | −35.4 | ..... | ..... | ..... | ..... | ..... |
| | 1409 | 9.8 | 14.81 | 13.81 | −25.8 | −11.8 | ..... | ..... | ..... | ..... | ..... |
| | 1410 | 11.1 | 14.61 | 13.61 | −31.5 | −18.0 | ..... | ..... | ..... | ..... | ..... |
| | 1411 | 17.1 | 14.41 | 13.41 | −48.6 | −35.0 | ..... | ..... | ..... | ..... | ..... |
| | 1412 | 15.3 | 14.81 | 13.81 | − 3.1 | 10.9 | ..... | ..... | ..... | ..... | ..... |
| | 1413 | 23.6 | 14.12 | 13.12 | 1.7 | 15.0 | ..... | ..... | ..... | ..... | ..... |
| | 1414 | 12.3 | 13.53 | 12.53 | 25.3 | 38.0 | ..... | ..... | ..... | ..... | ..... |
| 1380 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Nov. 4, '04 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| $9^h43^m$ | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 1391 | 1415 | 19.3 | 13.84 | 12.83 | 20.9 | ..... | 46.0 | ..... | ..... | ..... | ..... |
| Nov. 12, '04 | 1416 | 12.4 | 13.27 | 12.26 | −15.1 | ..... | 39.1 | ..... | ..... | ..... | ..... |
| $11^h11^m$ | 1417 | 14.9 | 14.04 | 13.03 | 7.1 | ..... | 32.6 | ..... | ..... | ..... | ..... |
| | 1418 | 25.3 | 14.45 | 13.44 | − 0.8 | ..... | 25.5 | ..... | ..... | ..... | ..... |
| | 1419 | 17.2 | 15.06 | 14.05 | − 3.7 | ..... | 23.8 | ..... | ..... | ..... | ..... |
| | 1420 | 16.6 | 14.81 | 13.80 | − 5.3 | ..... | 21.7 | ..... | ..... | ..... | ..... |
| | 1421 | 18.1 | 13.99 | 12.98 | − 9.1 | ..... | 16.3 | ..... | ..... | ..... | ..... |
| | 1422 | 18.8 | 14.55 | 13.54 | − 7.7 | ..... | 18.8 | ..... | ..... | ..... | ..... |
| | 1423 | 21.1 | 14.19 | 13.18 | 6.0 | ..... | 31.8 | ..... | ..... | ..... | ..... |
| | 1424 | 24.0 | 13.58 | 12.57 | 4.9 | ..... | 29.5 | ..... | ..... | ..... | ..... |
| | 1425 | −39.9 | 13.12 | 12.11 | 15.1 | ..... | 38.8 | ..... | ..... | ..... | ..... |
| | 1426 | −15.1 | 14.50 | 13.49 | −32.9 | ..... | − 6.5 | ..... | ..... | ..... | ..... |
| | 1427 | −20.7 | 14.55 | 13.54 | −40.5 | ..... | −14.0 | ..... | ..... | ..... | ..... |
| | 1428 | −18.4 | 13.94 | 12.93 | −39.1 | ..... | −13.8 | ..... | ..... | ..... | ..... |
| | 1429 | −17.2 | 14.40 | 13.39 | −45.2 | ..... | −19.0 | ..... | ..... | ..... | ..... |
| | 1430 | −12.1 | 13.89 | 12.88 | −43.2 | ..... | −18.0 | ..... | ..... | ..... | ..... |
| | 1431 | −15.7 | 14.76 | 13.75 | −47.7 | ..... | −20.8 | ..... | ..... | ..... | ..... |
| | 1433 | −25.3 | 14.55 | 13.54 | −34.5 | ..... | − 8.0 | ..... | ..... | ..... | ..... |
| | 1434 | 17.5 | 14.04 | 13.03 | −11.4 | ..... | 14.1 | ..... | ..... | ..... | ..... |
| | 1435 | −23.8 | 14.24 | 13.23 | 0.4 | ..... | 26.3 | ..... | ..... | ..... | ..... |
| 1394 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Nov. 14, '04 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| $10^h09^m$ | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 1404 | 1436 | 18.3 | 14.18 | 13.17 | 29.0 | 43.2 | ..... | ..... | ..... | ..... | ..... |
| Nov. 22, '04 | 1437 | 21.8 | 13.99 | 12.98 | 22.2 | 36.2 | ..... | ..... | ..... | ..... | ..... |
| $9^h43^m$ | 1438 | 15.1 | 14.18 | 13.17 | 27.7 | 41.9 | ..... | ..... | ..... | ..... | ..... |
| | 1439 | 10.2 | 13.90 | 12.89 | 19.4 | 33.3 | ..... | ..... | ..... | ..... | ..... |
| | 1440 | 8.6 | 14.45 | 13.44 | 16.9 | 31.4 | ..... | ..... | ..... | ..... | ..... |
| | 1441 | 5.7 | 14.27 | 13.26 | 15.2 | 29.5 | ..... | ..... | ..... | ..... | ..... |
| | 1442 | 10.8 | 14.18 | 13.17 | 16.4 | 30.6 | ..... | ..... | ..... | ..... | ..... |
| | 1443 | 11.4 | 14.27 | 13.26 | 14.5 | 28.8 | ..... | ..... | ..... | ..... | ..... |
| | 1444 | 17.0 | 13.81 | 12.80 | 15.9 | 29.7 | ..... | ..... | ..... | ..... | ..... |
| | 1445 | 10.9 | 14.18 | 13.17 | 8.5 | 22.7 | ..... | ..... | ..... | ..... | ..... |
| | 1446 | 10.3 | 14.08 | 13.07 | 5.8 | 19.9 | ..... | ..... | ..... | ..... | ..... |
| | 1447 | 13.5 | 14.55 | 13.54 | 3.4 | 18.0 | ..... | ..... | ..... | ..... | ..... |
| | 1448 | 19.8 | 14.73 | 13.72 | 5.1 | 19.9 | ..... | ..... | ..... | ..... | ..... |
| | 1449 | 20.3 | 14.08 | 13.07 | 1.7 | 15.8 | ..... | ..... | ..... | ..... | ..... |

TABLE 1—*Continued*

| Plate Number and Date | Number | Latitude | Diurnal Motion | | Longitudes on Days of Observation | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sidereal | Synodic | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1404 (*cont.*) | 1450 | 12°2 | 13°81 | 12°80 | 0°3 | 14°1 | ..... | ..... | ..... | ..... | ..... |
| | 1452 | 7.9 | 14.18 | 13.17 | − 0.3 | 13.9 | ..... | ..... | ..... | ..... | ..... |
| | 1453 | 9.8 | 13.99 | 12.98 | 0.1 | 14.1 | ..... | ..... | ..... | ..... | ..... |
| | 1454 | 10.2 | 13.16 | 12.15 | − 2.6 | 10.5 | ..... | ..... | ..... | ..... | ..... |
| | 1455 | 5.5 | 13.62 | 12.61 | − 1.0 | 12.6 | ..... | ..... | ..... | ..... | ..... |
| | 1456 | −17.8 | 13.25 | 12.24 | 27.1 | 40.3 | ..... | ..... | ..... | ..... | ..... |
| | 1457 | −18.5 | 14.36 | 13.35 | 24.8 | 39.2 | ..... | ..... | ..... | ..... | ..... |
| | 1458 | −16.9 | 14.45 | 13.44 | 23.0 | 37.5 | ..... | ..... | ..... | ..... | ..... |
| | 1459 | 18.9 | 13.81 | 12.80 | −24.1 | −10.3 | ..... | ..... | ..... | ..... | ..... |
| | 1460 | 21.5 | 12.88 | 11.87 | −24.4 | −11.6 | ..... | ..... | ..... | ..... | ..... |
| | 1461 | 19.6 | 14.55 | 13.54 | −27.2 | −12.6 | ..... | ..... | ..... | ..... | ..... |
| | 1462 | 17.8 | 14.45 | 13.44 | −35.2 | −20.7 | ..... | ..... | ..... | ..... | ..... |
| | 1463 | 17.5 | 13.62 | 12.61 | −42.5 | −28.9 | ..... | ..... | ..... | ..... | ..... |
| | 1464 | −21.1 | 13.81 | 12.80 | −40.3 | −26.5 | ..... | ..... | ..... | ..... | ..... |
| | 1465 | −17.0 | 13.53 | 12.52 | −18.5 | − 5.0 | ..... | ..... | ..... | ..... | ..... |
| | 1466 | −15.1 | 14.08 | 13.07 | −14.0 | 0.1 | ..... | ..... | ..... | ..... | ..... |
| | 1467 | − 2.8 | 15.29 | 14.28 | −17.2 | − 1.8 | ..... | ..... | ..... | ..... | ..... |
| | 1468 | −25.4 | 13.81 | 12.80 | −13.8 | 0.0 | ..... | ..... | ..... | ..... | ..... |
| 1408 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Nov. 23, '04 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| $11^h36^m$ | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 1419 | 1534 | 12.6 | 14.15 | 13.14 | 21.8 | 35.1 | ..... | ..... | ..... | ..... | ..... |
| Dec. 13, '04 | 1535 | 7.7 | 14.64 | 13.63 | 22.8 | 36.6 | ..... | ..... | ..... | ..... | ..... |
| $10^h24^m$ | 1536 | 9.9 | 14.64 | 13.63 | 28.1 | 41.9 | ..... | ..... | ..... | ..... | ..... |
| | 1537 | 9.7 | 14.64 | 13.63 | 30.6 | 44.4 | ..... | ..... | ..... | ..... | ..... |
| | 1540 | 14.6 | 14.45 | 13.44 | 25.3 | 38.9 | ..... | ..... | ..... | ..... | ..... |
| | 1541 | 16.1 | 14.74 | 13.73 | 21.0 | 37.9 | ..... | ..... | ..... | ..... | ..... |
| | 1542 | 19.1 | 14.25 | 13.24 | 26.6 | 40.0 | ..... | ..... | ..... | ..... | ..... |
| | 1543 | 18.6 | 13.83 | 12.82 | 23.2 | 36.5 | 49°2 | ..... | ..... | ..... | ..... |
| | 1544 | 12.5 | 13.58 | 12.57 | 8.7 | 21.8 | 34.2 | ..... | ..... | ..... | ..... |
| | 1545 | 13.0 | 13.76 | 12.75 | 6.6 | 19.5 | ..... | ..... | ..... | ..... | ..... |
| | 1546 | 15.8 | 14.28 | 13.27 | 7.3 | 21.2 | 34.2 | ..... | ..... | ..... | ..... |
| | 1547 | 12.3 | 14.13 | 13.12 | − 0.2 | 13.2 | 26.4 | ..... | ..... | ..... | ..... |
| | 1548 | 15.7 | 14.15 | 13.14 | 1.0 | 14.3 | ..... | ..... | ..... | ..... | ..... |
| | 1549 | 13.3 | 14.64 | 13.63 | − 2.7 | 11.1 | ..... | ..... | ..... | ..... | ..... |
| | 1550 | 15.0 | 14.64 | 13.63 | − 6.4 | 7.4 | ..... | ..... | ..... | ..... | ..... |
| | 1551 | 23.5 | 15.14 | 14.13 | − 4.4 | 9.9 | ..... | ..... | ..... | ..... | ..... |
| | 1552 | 22.0 | 13.95 | 12.94 | 28.1 | 41.2 | ..... | ..... | ..... | ..... | ..... |
| | 1553 | 30.5 | 12.80 | 11.79 | 25.2 | 37.0 | 49.1 | ..... | ..... | ..... | ..... |
| | 1554 | 33.8 | 13.56 | 12.55 | 21.0 | 33.7 | ..... | ..... | ..... | ..... | ..... |
| | 1555 | 20.5 | 14.25 | 13.24 | 1.9 | 15.3 | ..... | ..... | ..... | ..... | ..... |
| | 1556 | 12.3 | 13.66 | 12.65 | − 6.9 | 5.9 | ..... | ..... | ..... | ..... | ..... |
| | 1557 | 12.7 | 14.55 | 13.54 | − 9.8 | 3.9 | ..... | ..... | ..... | ..... | ..... |
| | 1558 | 10.1 | 14.64 | 13.63 | − 9.9 | 3.9 | ..... | ..... | ..... | ..... | ..... |
| | 1559 | 14.5 | 14.11 | 13.10 | −15.6 | − 2.1 | 11.5 | ..... | 37°3 | ..... | ..... |
| | 1560 | 14.3 | 14.82 | 13.81 | −18.0 | − 4.1 | 10.0 | ..... | ..... | ..... | ..... |
| | 1561 | 12.2 | 14.13 | 13.12 | −18.6 | − 5.1 | 8.2 | ..... | 34.4 | ..... | ..... |
| | 1562 | 11.2 | 14.08 | 13.07 | −19.4 | − 6.2 | 7.1 | ..... | ..... | ..... | ..... |
| | 1563 | 15.3 | 14.45 | 13.44 | −21.9 | − 8.3 | ..... | ..... | ..... | ..... | ..... |
| | 1564 | 20.5 | 13.53 | 12.52 | −26.1 | −13.7 | − 0.7 | ..... | ..... | ..... | ..... |
| | 1565 | 13.5 | 14.37 | 13.36 | −23.5 | −10.1 | 3.6 | ..... | ..... | ..... | ..... |
| | 1566 | 16.3 | 14.17 | 13.16 | −25.0 | −12.1 | 1.4 | ..... | 28.0 | ..... | ..... |
| | 1567 | 17.5 | 13.53 | 12.52 | −27.8 | −15.2 | − 2.4 | ..... | ..... | ..... | ..... |
| | 1568 | 21.8 | 13.88 | 12.87 | −32.9 | −20.0 | − 6.8 | ..... | ..... | ..... | ..... |
| | 1569 | 18.0 | 13.85 | 12.84 | −36.9 | −23.9 | ..... | ..... | ..... | ..... | ..... |
| | 1570 | 17.8 | 13.93 | 12.92 | −39.5 | −27.5 | −13.3 | ..... | ..... | ..... | ..... |
| | 1571 | −34.5 | 13.76 | 12.75 | 26.0 | 38.9 | ..... | ..... | ..... | ..... | ..... |
| | 1573 | −11.9 | 14.55 | 13.54 | 8.3 | 22.0 | ..... | ..... | ..... | ..... | ..... |
| | 1574 | −15.2 | 14.62 | 13.61 | 8.4 | 22.0 | 36.0 | ..... | ..... | ..... | ..... |
| | 1575 | −16.1 | 13.98 | 12.97 | 2.2 | 15.3 | 28.5 | ..... | ..... | ..... | ..... |
| | 1576 | −24.9 | 14.10 | 13.09 | − 5.0 | 8.2 | 21.7 | ..... | 47.8 | ..... | ..... |
| | 1577 | −29.5 | 12.96 | 11.95 | −13.1 | − 1.0 | ..... | ..... | ..... | ..... | ..... |
| | 1578 | −22.9 | 14.08 | 13.07 | −16.2 | − 3.5 | 10.3 | ..... | ..... | ..... | ..... |
| | 1579 | −27.2 | 13.24 | 12.23 | −17.1 | − 4.8 | 8.9 | ..... | 32.1 | ..... | ..... |
| | 1580 | −33.3 | 13.38 | 12.37 | −16.2 | − 3.5 | 9.6 | ..... | 33.7 | ..... | ..... |
| | 1581 | −31.3 | 13.73 | 12.72 | −21.9 | − 9.2 | 3.9 | ..... | ..... | ..... | ..... |

TABLE I—*Continued*

| Plate Number and Date | Number | Latitude | Diurnal Motion | | Longitudes on Days of Observation | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sidereal | Synodic | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1419 (*cont.*) | 1582 | −28°0 | 13°16 | 12°15 | −21°2 | − 8°9 | ..... | ..... | ..... | ..... | ..... |
| | 1583 | −27.9 | 12.94 | 11.93 | −25.1 | −12.9 | − 0°9 | ..... | ..... | ..... | ..... |
| | 1584 | −14.5 | 14.25 | 13.24 | −31.0 | −17.6 | ..... | ..... | ..... | ..... | ..... |
| | 1585 | −13.6 | 14.74 | 13.73 | −34.0 | −20.1 | ..... | ..... | ..... | ..... | ..... |
| | 1586 | 2.9 | 14.94 | 13.93 | −39.8 | −25.7 | ..... | ..... | ..... | ..... | ..... |
| | 1587 | 5.0 | 15.26 | 14.25 | −42.4 | −28.2 | −13.5 | ..... | ..... | ..... | ..... |
| | 1588 | 15.8 | 14.37 | 13.36 | − 1.8 | 11.7 | 25.3 | ..... | ..... | ..... | ..... |
| | 1589 | 13.9 | 13.95 | 12.94 | 0.9 | 14.0 | ..... | ..... | ..... | ..... | ..... |
| 1423 | 1590 | 16.4 | 14.01 | 13.00 | 18.0 | 31.2 | ..... | ..... | ..... | ..... | ..... |
| Dec. 14, '04 | 1591 | −17.5 | 14.60 | 13.59 | 17.2 | 31.0 | ..... | ..... | ..... | ..... | ..... |
| $10^h41^m5$ | 1592 | −21.7 | 14.79 | 13.78 | 18.2 | 32.2 | ..... | ..... | ..... | ..... | ..... |
| | 1593 | −26.2 | 14.30 | 13.29 | 15.5 | 29.0 | ..... | ..... | ..... | ..... | ..... |
| | 1594 | −29.2 | 14.11 | 13.10 | 15.9 | 29.2 | ..... | ..... | ..... | ..... | ..... |
| | 1595 | −30.8 | 14.01 | 13.00 | 4.2 | 17.4 | ..... | ..... | ..... | ..... | ..... |
| | 1596 | 24.9 | 13.95 | 12.94 | −24.9 | −11.3 | ..... | 14°3 | ..... | ..... | ..... |
| | 1597 | −25.2 | 14.01 | 13.00 | 10.8 | 24.0 | ..... | ..... | ..... | ..... | ..... |
| | 1598 | 11.2 | 14.29 | 13.28 | −16.9 | − 3.2 | ..... | 23.3 | ..... | ..... | ..... |
| | 1599 | −11.0 | 14.99 | 13.98 | −38.2 | −24.0 | ..... | ..... | ..... | ..... | ..... |
| | 1600 | 12.8 | 14.70 | 13.69 | −20.0 | − 6.1 | ..... | ..... | ..... | ..... | ..... |
| | 1601 | 15.3 | 13.42 | 12.41 | −23.2 | −10.6 | ..... | ..... | ..... | ..... | ..... |
| | 1602 | 24.3 | 13.91 | 12.90 | −28.9 | −15.3 | ..... | 10.2 | ..... | ..... | ..... |
| | 1603 | 8.9 | 14.50 | 13.49 | −34.8 | −21.1 | ..... | ..... | ..... | ..... | ..... |
| | 1604 | 3.5 | 14.30 | 13.29 | −43.4 | −29.9 | ..... | ..... | ..... | ..... | ..... |
| 1429 | 1605 | 25.0 | 14.01 | 13.00 | −13.6 | ..... | 12.5 | ..... | ..... | ..... | ..... |
| Dec. 15, '04 | 1606 | 24.1 | 13.26 | 12.25 | −29.8 | ..... | − 5.2 | ..... | ..... | ..... | ..... |
| $11^h04^m$ | 1607 | 26.5 | 13.86 | 12.85 | −30.8 | ..... | − 5.0 | ..... | ..... | ..... | ..... |
| | 1608 | 16.4 | 13.60 | 12.59 | −35.9 | ..... | − 9.4 | ..... | 16°7 | ..... | 39°7 |
| | 1609 | 11.6 | 14.50 | 13.49 | −42.2 | ..... | −14.1 | ..... | 11.9 | ..... | ..... |
| | 1610 | −14.6 | 14.35 | 13.34 | −32.9 | ..... | − 6.1 | ..... | 20.5 | ..... | 47.5 |
| | 1611 | 16.7 | 14.41 | 13.40 | 3.9 | ..... | 30.8 | ..... | ..... | ..... | ..... |
| | 1612 | 16.2 | 13.75 | 12.74 | − 5.3 | ..... | 20.0 | ..... | 45.8 | ..... | ..... |
| | 1604′ | 13.2 | 13.86 | 12.85 | − 8.2 | ..... | 17.6 | ..... | ..... | ..... | ..... |
| 1432 | 1613 | 33.9 | 13.43 | 12.42 | −11.2 | ..... | 13.2 | ..... | 38.7 | ..... | ..... |
| Dec. 17, '04 | 1614 | 30.9 | 13.10 | 12.09 | −13.4 | ..... | 10.8 | ..... | ..... | ..... | ..... |
| $11^h15^m$ | 1615 | −16.0 | 14.32 | 13.31 | −13.0 | ..... | 12.4 | ..... | 40.5 | ..... | ..... |
| | 1616 | −15.0 | 13.54 | 12.53 | −16.2 | ..... | 8.9 | ..... | ..... | ..... | ..... |
| | 1617 | −19.7 | 14.44 | 13.43 | −21.9 | ..... | 5.0 | ..... | ..... | ..... | ..... |
| | 1618 | −18.5 | 14.39 | 13.38 | 4.7 | ..... | 31.5 | ..... | ..... | ..... | ..... |
| | 1620 | 31.7 | 13.59 | 12.58 | − 7.9 | ..... | 17.3 | ..... | ..... | ..... | ..... |
| | 1621 | 31.4 | 13.94 | 12.93 | − 5.1 | ..... | 20.8 | ..... | ..... | ..... | ..... |
| | 1622 | 12.2 | 14.19 | 13.18 | −20.1 | ..... | 6.3 | ..... | ..... | ..... | ..... |
| | 1623 | 14.6 | 13.79 | 12.78 | −21.5 | ..... | 4.1 | ..... | ..... | ..... | ..... |
| | 1624 | 21.4 | 14.09 | 13.08 | 15.8 | ..... | 42.0 | ..... | ..... | ..... | ..... |
| 1438 | 1625 | 34.2 | 13.46 | 12.45 | 10.8 | ..... | 35.9 | ..... | ..... | ..... | ..... |
| Dec. 19, '04 | 1626 | −12.6 | 14.25 | 13.24 | 18.8 | ..... | 45.5 | ..... | ..... | ..... | ..... |
| $11^h18^m5$ | 1627 | 11.2 | 13.81 | 12.80 | −13.8 | ..... | 12.0 | ..... | ..... | ..... | ..... |
| | 1628 | 19.7 | 14.15 | 13.14 | −14.9 | ..... | 11.6 | ..... | ..... | ..... | ..... |
| | 1629 | 22.3 | 13.51 | 12.50 | −13.0 | ..... | 12.2 | ..... | ..... | ..... | ..... |
| | 1630 | 22.1 | 14.10 | 13.09 | −29.1 | ..... | − 2.7 | ..... | ..... | ..... | ..... |
| | 1631 | 20.8 | 14.01 | 13.00 | −34.3 | ..... | − 8.1 | ..... | ..... | ..... | ..... |
| | 1632 | 24.2 | 14.50 | 13.49 | −37.6 | ..... | −10.4 | ..... | ..... | ..... | ..... |
| | 1633 | 17.3 | 14.40 | 13.39 | −36.1 | ..... | − 9.1 | ..... | ..... | ..... | ..... |
| | 1634 | 14.6 | 14.35 | 13.34 | −33.1 | ..... | − 6.2 | ..... | ..... | ..... | ..... |
| | 1635 | 13.5 | 14.40 | 13.39 | −32.0 | ..... | − 5.0 | ..... | ..... | ..... | ..... |
| | 1636 | 16.0 | 14.01 | 13.00 | −44.2 | ..... | −18.0 | ..... | ..... | ..... | ..... |
| | 1637 | 9.3 | 14.35 | 13.34 | − 1.1 | ..... | 25.8 | ..... | ..... | ..... | ..... |
| | 1638 | 12.6 | 14.55 | 13.54 | − 3.1 | ..... | 24.2 | ..... | ..... | ..... | ..... |
| | 1639 | 26.2 | 13.71 | 12.70 | 13.2 | ..... | 38.8 | ..... | ..... | ..... | ..... |
| | 1640 | 26.3 | 13.86 | 12.85 | 21.5 | ..... | 47.4 | ..... | ..... | ..... | ..... |
| 1443 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Dec. 21, '04 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| $11^h41^m5$ | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |

TABLE I—*Continued*

| Plate Number and Date | Number | Latitude | Diurnal Motion | | Longitudes on Days of Observation | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sidereal | Synodic | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1450 | 1641 | 20°5 | 13°54 | 12°53 | 31°0 | 43°6 | ..... | ..... | ..... | ..... | ..... |
| Dec. 30, '04 | 1642 | 18.3 | 14.63 | 13.62 | 25.0 | 38.7 | ..... | ..... | ..... | ..... | ..... |
| $10^h42^m5$ | 1643 | 17.0 | 13.73 | 12.72 | 30.3 | 43.1 | ..... | ..... | ..... | ..... | ..... |
| | 1644 | 15.4 | 14.83 | 13.82 | 26.6 | 40.5 | ..... | ..... | ..... | ..... | ..... |
| | 1645 | 12.0 | 14.33 | 13.32 | 30.1 | 43.5 | ..... | ..... | ..... | ..... | ..... |
| | 1646 | 8.4 | 13.93 | 12.92 | 21.2 | 34.2 | ..... | ..... | ..... | ..... | ..... |
| | 1647 | 21.7 | 13.24 | 12.23 | 5.0 | 17.3 | ..... | ..... | ..... | ..... | ..... |
| | 1648 | 21.7 | 13.64 | 12.63 | − 8.7 | 4.0 | ..... | ..... | ..... | ..... | ..... |
| | 1649 | 17.3 | 14.23 | 13.22 | −23.0 | − 9.7 | ..... | ..... | ..... | ..... | ..... |
| | 1650 | −17.8 | 12.84 | 11.83 | 31.5 | 43.4 | ..... | ..... | ..... | ..... | ..... |
| | 1655 | −22.1 | 14.03 | 13.02 | 22.1 | 35.2 | ..... | ..... | ..... | ..... | ..... |
| | 1656 | −26.8 | 14.03 | 13.02 | 21.3 | 34.4 | ..... | ..... | ..... | ..... | ..... |
| | 1657 | −30.0 | 14.23 | 13.22 | 15.7 | 29.0 | ..... | ..... | ..... | ..... | ..... |
| | 1658 | − 6.1 | 14.23 | 13.22 | 8.0 | 21.3 | ..... | ..... | ..... | ..... | ..... |
| | 1659 | − 4.8 | 14.43 | 13.42 | 6.1 | 19.6 | ..... | ..... | ..... | ..... | ..... |
| | 1660 | −13.4 | 15.72 | 14.71 | 0.2 | 15.0 | ..... | ..... | ..... | ..... | ..... |
| | 1661 | −12.8 | 15.13 | 14.12 | − 1.2 | 13.0 | ..... | ..... | ..... | ..... | ..... |
| | 1662 | −19.0 | 15.33 | 14.32 | − 2.3 | 12.1 | ..... | ..... | ..... | ..... | ..... |
| | 1663 | −21.4 | 13.73 | 12.72 | − 5.4 | 7.4 | ..... | ..... | ..... | ..... | ..... |
| | 1664 | −19.4 | 14.13 | 13.12 | − 9.2 | 4.0 | ..... | ..... | ..... | ..... | ..... |
| | 1665 | −17.7 | 15.23 | 14.22 | − 9.3 | 5.0 | ..... | ..... | ..... | ..... | ..... |
| | 1666 | −23.9 | 13.24 | 12.23 | −12.7 | − 0.4 | ..... | ..... | ..... | ..... | ..... |
| 1453 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Dec. 31, '04 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| $10^h51^m$ | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 1467 | 1667 | 15.3 | 14.65 | 13.63 | 31.2 | 44.4 | ..... | ..... | ..... | ..... | ..... |
| Jan. 12, '05 | 1668 | 17.3 | 14.34 | 13.32 | 27.6 | 40.5 | ..... | ..... | ..... | ..... | ..... |
| $11^h39^m5$ | 1669 | 12.4 | 15.17 | 14.15 | 24.3 | 38.0 | ..... | ..... | ..... | ..... | ..... |
| | 1670 | 11.2 | 14.44 | 13.42 | 27.9 | 40.9 | ..... | ..... | ..... | ..... | ..... |
| | 1671 | 7.5 | 14.60 | 13.58 | 14.3 | 27.1 | 41°0 | ..... | ..... | ..... | ..... |
| | 1672 | 14.2 | 14.09 | 13.07 | 10.9 | ..... | 36.6 | ..... | ..... | ..... | ..... |
| | 1673 | 15.5 | 13.84 | 12.82 | 8.8 | 20.9 | 34.0 | ..... | ..... | ..... | ..... |
| | 1674 | 17.8 | 14.35 | 13.33 | 9.8 | 22.3 | 36.0 | ..... | ..... | ..... | ..... |
| | 1675 | 18.4 | 14.45 | 13.43 | 6.1 | 18.8 | 32.5 | ..... | ..... | ..... | ..... |
| | 1676 | 19.4 | 14.24 | 13.22 | 6.2 | 19.0 | ..... | ..... | ..... | ..... | ..... |
| | 1677 | 20.1 | 14.13 | 13.11 | 4.6 | 17.3 | ..... | ..... | ..... | ..... | ..... |
| | 1678 | 16.4 | 13.94 | 12.92 | 3.5 | 16.1 | 28.9 | ..... | ..... | ..... | ..... |
| | 1679 | 13.0 | 14.24 | 13.22 | 3.2 | 16.4 | 29.2 | ..... | ..... | ..... | ..... |
| | 1680 | 14.2 | 13.88 | 12.86 | 1.1 | 13.9 | 26.4 | ..... | ..... | ..... | ..... |
| | 1681 | 15.3 | 14.04 | 13.02 | − 1.3 | 10.9 | 24.3 | ..... | ..... | ..... | ..... |
| | 1682 | 21.5 | 14.14 | 13.12 | 0.0 | 12.7 | 25.8 | ..... | ..... | ..... | ..... |
| | 1683 | 18.9 | 14.75 | 13.73 | − 2.9 | 10.4 | ..... | ..... | ..... | ..... | ..... |
| | 1684 | 25.0 | 14.09 | 13.07 | − 7.0 | 5.6 | 18.7 | ..... | ..... | ..... | ..... |
| | 1685 | 27.0 | 13.99 | 12.97 | − 7.0 | 5.5 | 18.5 | ..... | ..... | ..... | ..... |
| | 1686 | 24.6 | 13.72 | 12.70 | − 8.5 | 3.8 | ..... | ..... | ..... | ..... | ..... |
| | 1687 | 27.5 | 13.48 | 12.46 | − 9.0 | 2.9 | 15.5 | ..... | ..... | ..... | ..... |
| | 1688 | 30.2 | 14.09 | 13.07 | −13.9 | − 0.9 | 11.8 | ..... | ..... | ..... | ..... |
| | 1689 | 30.7 | 13.72 | 12.70 | −17.0 | − 4.7 | ..... | ..... | ..... | ..... | ..... |
| | 1690 | 28.6 | 14.44 | 13.42 | −19.1 | − 6.1 | ..... | ..... | ..... | ..... | ..... |
| | 1691 | 25.3 | 14.14 | 13.12 | −15.8 | − 2.8 | 10.0 | ..... | ..... | ..... | ..... |
| | 1692 | 23.0 | 13.43 | 12.41 | −13.2 | − 1.2 | 11.2 | ..... | ..... | ..... | ..... |
| | 1693 | 23.5 | 14.44 | 13.42 | −11.7 | 1.3 | ..... | ..... | ..... | ..... | ..... |
| | 1694 | 20.9 | 14.34 | 13.32 | −13.0 | − 0.1 | 13.2 | ..... | ..... | ..... | ..... |
| | 1695 | 20.1 | 14.50 | 13.48 | −17.4 | − 4.0 | 9.1 | ..... | ..... | ..... | ..... |
| | 1696 | 13.5 | 13.82 | 12.80 | −24.4 | −12.0 | ..... | ..... | ..... | ..... | ..... |
| | 1697 | 20.7 | 13.84 | 12.82 | −28.2 | −15.7 | − 3.0 | ..... | ..... | ..... | ..... |
| | 1698 | 27.7 | 13.84 | 12.82 | −31.0 | −18.5 | − 5.8 | ..... | ..... | ..... | ..... |
| | 1699 | 5.0 | 13.99 | 12.97 | −45.0 | −32.4 | −19.5 | ..... | ..... | ..... | ..... |
| | 1700 | 7.1 | 14.03 | 13.01 | −44.9 | −32.3 | ..... | ..... | ..... | ..... | ..... |
| | 1701 | − 8.5 | 14.65 | 13.63 | −18.3 | − 4.6 | 8.5 | ..... | ..... | ..... | ..... |
| | 1702 | − 7.0 | 14.65 | 13.63 | −15.1 | − 1.9 | ..... | ..... | ..... | ..... | ..... |
| | 1703 | −20.6 | 14.75 | 13.73 | −19.2 | − 5.7 | 7.8 | ..... | ..... | ..... | ..... |
| | 1704 | −15.9 | 14.86 | 13.84 | 34.7 | 48.1 | ..... | ..... | ..... | ..... | ..... |
| | 1705 | −25.7 | 14.13 | 13.11 | 26.2 | 38.9 | ..... | ..... | ..... | ..... | ..... |
| | 1706 | −29.7 | 14.03 | 13.01 | 26.5 | 39.1 | ..... | ..... | ..... | ..... | ..... |
| | 1708 | −31.2 | 13.72 | 12.70 | 22.8 | 35.1 | ..... | ..... | ..... | ..... | ..... |

TABLE I—*Continued*

| Plate Number and Date | Number | Latitude | Diurnal Motion | | Longitudes on Days of Observation | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sidereal | Synodic | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1467 (*cont.*) | 1709 | −41°.5 | 12°.01 | 10°.99 | 22°.7 | 33°.1 | 44°.3 | ..... | ..... | ..... | ..... |
| | 1710 | −35.1 | 13.88 | 12.86 | 15.4 | 28.3 | 40.7 | ..... | ..... | ..... | ..... |
| | 1711 | −31.4 | 13.94 | 12.92 | − 1.5 | 11.3 | 23.9 | ..... | ..... | ..... | ..... |
| | 1712 | −32.7 | 13.28 | 12.26 | − 8.0 | 3.3 | 16.1 | ..... | ..... | ..... | ..... |
| | 1713 | −13.7 | 13.89 | 12.87 | 17.9 | 29.7 | 43.2 | ..... | ..... | ..... | ..... |
| | 1714 | −17.0 | 14.29 | 13.27 | 18.3 | 31.7 | 44.4 | ..... | ..... | ..... | ..... |
| | 1715 | −17.0 | 13.99 | 12.97 | 15.5 | 28.2 | 41.0 | ..... | ..... | ..... | ..... |
| | 1716 | −17.6 | 14.44 | 13.42 | 13.7 | 26.7 | ..... | ..... | ..... | ..... | ..... |
| | 1717 | −21.7 | 14.40 | 13.38 | 17.6 | ..... | 43.9 | ..... | ..... | ..... | ..... |
| | 1718 | −17.7 | 14.90 | 13.88 | 7.4 | 20.7 | 34.7 | ..... | ..... | ..... | ..... |
| 1470 | 1719 | 15.1 | 14.85 | 13.83 | 25.0 | 38.8 | ..... | ..... | ..... | ..... | ..... |
| Jan. 13, '05 | 1720 | 21.3 | 13.75 | 12.73 | 22.2 | 34.9 | ..... | ..... | ..... | ..... | ..... |
| $10^h54^m$ | 1721 | −17.7 | 14.85 | 13.83 | − 7.8 | 6.0 | ..... | ..... | ..... | ..... | ..... |
| | 1722 | 12.9 | 13.45 | 12.43 | −42.1 | −29.7 | ..... | ..... | ..... | ..... | ..... |
| | 1723 | 14.2 | 13.65 | 12.63 | −38.1 | −25.5 | ..... | ..... | ..... | ..... | ..... |
| | 1724 | 32.1 | 13.95 | 12.93 | −26.9 | −14.0 | ..... | ..... | ..... | ..... | ..... |
| | 1725 | 34.9 | 13.95 | 12.93 | −33.2 | −20.3 | ..... | ..... | ..... | ..... | ..... |
| | 1726 | −29.2 | 13.55 | 12.53 | 0.5 | 13.0 | ..... | ..... | ..... | ..... | ..... |
| | 1727 | −20.0 | 13.75 | 12.73 | −24.9 | −12.2 | ..... | ..... | ..... | ..... | ..... |
| | 1728 | −22.0 | 13.75 | 12.73 | −28.8 | −16.1 | ..... | ..... | ..... | ..... | ..... |
| | 1729 | −17.0 | 13.15 | 12.13 | −26.5 | −14.4 | ..... | ..... | ..... | ..... | ..... |
| | 1730 | −21.2 | 14.15 | 13.13 | − 9.1 | 4.0 | ..... | ..... | ..... | ..... | ..... |
| | 1731 | −15.8 | 14.15 | 13.13 | −14.5 | − 1.4 | ..... | ..... | ..... | ..... | ..... |
| 1476 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Jan. 14, '05 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| $10^h51^m$ | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 1516 | 1737 | 8.2 | 14.69 | 13.68 | 21.8 | 35.5 | ..... | ..... | ..... | ..... | ..... |
| Feb. 17, '05 | 1738 | 9.9 | 14.19 | 13.18 | 24.4 | 37.6 | ..... | ..... | ..... | ..... | ..... |
| $10^h51^m5$ | 1739 | 10.5 | 14.09 | 13.08 | 22.9 | 36.0 | ..... | ..... | ..... | ..... | ..... |
| | 1740 | 11.9 | 14.19 | 13.18 | 20.0 | 33.2 | ..... | ..... | ..... | ..... | ..... |
| | 1741 | 7.8 | 14.39 | 13.38 | 15.3 | 28.7 | ..... | ..... | ..... | ..... | ..... |
| | 1742 | 7.3 | 14.09 | 13.08 | 19.9 | 33.0 | ..... | ..... | ..... | ..... | ..... |
| | 1743 | −22.0 | 14.49 | 13.48 | 18.2 | 31.7 | ..... | ..... | ..... | ..... | ..... |
| | 1744 | −20.4 | 13.99 | 12.98 | 19.8 | 32.8 | ..... | ..... | ..... | ..... | ..... |
| | 1745 | −16.8 | 14.19 | 13.18 | 25.3 | 38.5 | ..... | ..... | ..... | ..... | ..... |
| | 1746 | −22.1 | 14.19 | 13.18 | 25.4 | 38.6 | ..... | ..... | ..... | ..... | ..... |
| | 1747 | −17.4 | 14.39 | 13.38 | 29.3 | 42.7 | ..... | ..... | ..... | ..... | ..... |
| | 1748 | −18.4 | 14.19 | 13.18 | 30.7 | 43.9 | ..... | ..... | ..... | ..... | ..... |
| | 1749 | −16.1 | 14.89 | 13.88 | 31.4 | 45.3 | ..... | ..... | ..... | ..... | ..... |
| | 1750 | −14.2 | 13.99 | 12.98 | 29.9 | 42.9 | ..... | ..... | ..... | ..... | ..... |
| | 1751 | −12.6 | 14.39 | 13.38 | 27.9 | 41.3 | ..... | ..... | ..... | ..... | ..... |
| | 1752 | − 9.5 | 14.49 | 13.48 | 21.3 | 34.8 | ..... | ..... | ..... | ..... | ..... |
| | 1753 | −17.5 | 13.49 | 12.48 | 16.7 | 29.2 | ..... | ..... | ..... | ..... | ..... |
| | 1754 | 21.5 | 14.49 | 13.48 | 18.7 | 32.2 | ..... | ..... | ..... | ..... | ..... |
| | 1755 | 19.3 | 14.69 | 13.68 | 17.2 | 30.9 | ..... | ..... | ..... | ..... | ..... |
| | 1756 | 18.2 | 13.39 | 12.38 | 16.1 | 28.5 | ..... | ..... | ..... | ..... | ..... |
| | 1757 | 22.4 | 13.79 | 12.78 | 11.4 | 24.2 | ..... | ..... | ..... | ..... | ..... |
| | 1758 | 22.3 | 13.49 | 12.48 | 16.2 | 28.7 | ..... | ..... | ..... | ..... | ..... |
| | 1759 | 27.2 | 14.59 | 13.58 | 16.5 | 30.1 | ..... | ..... | ..... | ..... | ..... |
| | 1760 | 21.9 | 13.09 | 12.08 | 2.0 | 14.1 | ..... | ..... | ..... | ..... | ..... |
| | 1761 | 25.3 | 12.89 | 11.88 | 2.8 | 14.7 | ..... | ..... | ..... | ..... | ..... |
| | 1762 | 15.2 | 14.39 | 13.38 | −32.7 | −19.3 | ..... | ..... | ..... | ..... | ..... |
| | 1763 | − 5.1 | 14.39 | 13.38 | 30.4 | 43.8 | ..... | ..... | ..... | ..... | ..... |
| | 1764 | 8.4 | 14.49 | 13.48 | 31.9 | 45.4 | ..... | ..... | ..... | ..... | ..... |
| | 1765 | −20.9 | 14.09 | 13.08 | −38.1 | −25.0 | ..... | ..... | ..... | ..... | ..... |
| | 1766 | −25.5 | 12.59 | 11.58 | −45.6 | −34.0 | ..... | ..... | ..... | ..... | ..... |
| | 1767 | −18.2 | 14.09 | 13.08 | 25.3 | 38.4 | ..... | ..... | ..... | ..... | ..... |
| | 1768 | −19.0 | 13.69 | 12.68 | 23.9 | 36.6 | ..... | ..... | ..... | ..... | ..... |
| | 1769 | − 8.8 | 14.99 | 13.98 | 27.2 | 41.2 | ..... | ..... | ..... | ..... | ..... |
| | 1770 | −20.5 | 12.59 | 11.58 | −45.0 | −33.3 | ..... | ..... | ..... | ..... | ..... |
| | 1771 | 12.4 | 13.79 | 12.78 | 18.2 | 31.0 | ..... | ..... | ..... | ..... | ..... |
| 1519 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Feb. 18, '05 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| $10^h54^m$ | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 1529 | 1772 | −18.2 | 14.97 | 13.96 | 15.3 | 29.7 | ..... | ..... | ..... | ..... | ..... |
| Feb. 28, '05 | 1773 | −17.1 | 14.00 | 12.99 | 24.9 | 38.3 | ..... | ..... | ..... | ..... | ..... |
| $10^h17^m5$ | 1774 | −17.6 | 13.81 | 12.80 | −37.9 | −24.7 | ..... | ..... | ..... | ..... | ..... |

TABLE I—*Continued*

| Plate Number and Date | Number | Latitude | Diurnal Motion | | Longitudes on Days of Observation | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sidereal | Synodic | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1529 (*cont.*) | 1775 | −24°.4 | 13°.52 | 12°.51 | −33°.7 | −20°.8 | ..... | ..... | ..... | ..... | ..... |
| | 1776 | −21.1 | 14.39 | 13.38 | −30.3 | −16.5 | ..... | ..... | ..... | ..... | ..... |
| | 1777 | −19.9 | 15.07 | 14.06 | −30.3 | −15.8 | ..... | ..... | ..... | ..... | ..... |
| | 1778 | −18.0 | 14.39 | 13.38 | −29.3 | −15.5 | ..... | ..... | ..... | ..... | ..... |
| | 1779 | −16.1 | 14.39 | 13.38 | −28.1 | −14.3 | ..... | ..... | ..... | ..... | ..... |
| | 1780 | −17.6 | 14.29 | 13.28 | −25.7 | −12.0 | ..... | ..... | ..... | ..... | ..... |
| | 1781 | −13.2 | 14.78 | 13.77 | −27.3 | −13.1 | ..... | ..... | ..... | ..... | ..... |
| | 1782 | −16.3 | 14.39 | 13.38 | −29.9 | −16.1 | ..... | ..... | ..... | ..... | ..... |
| | 1783 | −21.7 | 14.20 | 13.19 | −26.6 | −13.0 | ..... | ..... | ..... | ..... | ..... |
| | 1784 | −21.9 | 14.10 | 13.09 | −22.4 | − 8.9 | ..... | ..... | ..... | ..... | ..... |
| | 1785 | −18.6 | 14.78 | 13.77 | −20.2 | − 6.0 | ..... | ..... | ..... | ..... | ..... |
| | 1786 | −20.1 | 14.59 | 13.58 | 16.4 | 30.4 | ..... | ..... | ..... | ..... | ..... |
| | 1787 | −19.4 | 14.20 | 13.19 | 12.9 | 26.5 | ..... | ..... | ..... | ..... | ..... |
| | 1788 | −22.0 | 14.10 | 13.09 | 11.8 | 25.3 | ..... | ..... | ..... | ..... | ..... |
| | 1789 | −18.1 | 14.20 | 13.19 | 27.4 | 41.0 | ..... | ..... | ..... | ..... | ..... |
| | 1790 | 4.0 | 14.39 | 13.38 | 28.3 | 42.1 | ..... | ..... | ..... | ..... | ..... |
| | 1791 | 2.1 | 14.39 | 13.38 | 28.7 | 42.5 | ..... | ..... | ..... | ..... | ..... |
| | 1792 | 1.4 | 13.71 | 12.70 | 27.1 | 40.2 | ..... | ..... | ..... | ..... | ..... |
| | 1793 | 3.4 | 14.68 | 13.67 | 26.3 | 40.4 | ..... | ..... | ..... | ..... | ..... |
| | 1794 | 9.9 | 14.68 | 13.67 | 24.9 | 39.0 | ..... | ..... | ..... | ..... | ..... |
| | 1795 | 10.0 | 14.49 | 13.48 | 30.4 | 44.3 | ..... | ..... | ..... | ..... | ..... |
| | 1796 | 5.3 | 14.39 | 13.38 | 29.3 | 43.1 | ..... | ..... | ..... | ..... | ..... |
| | 1797 | 4.5 | 14.10 | 13.09 | 35.4 | 48.9 | ..... | ..... | ..... | ..... | ..... |
| | 1798 | −26.7 | 13.81 | 12.80 | − 3.5 | 9.7 | ..... | ..... | ..... | ..... | ..... |
| | 1799 | −27.1 | 13.03 | 12.02 | −44.7 | −32.3 | ..... | ..... | ..... | ..... | ..... |
| | 1800 | 5.4 | 14.00 | 12.99 | 31.8 | 45.2 | ..... | ..... | ..... | ..... | ..... |
| | 1801 | 13.5 | 12.94 | 11.93 | 23.9 | 36.2 | ..... | ..... | ..... | ..... | ..... |
| 1535 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Mar. 1, '05 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| $11^h02^m.5$ | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 1543 | 1802 | 10.1 | 14.14 | 13.13 | 9.1 | 22.1 | ..... | ..... | ..... | ..... | ..... |
| Mar. 8, '05 | 1803 | 11.2 | 15.05 | 14.04 | 7.0 | 20.9 | ..... | ..... | ..... | ..... | ..... |
| $11^h19^m$ | 1804 | 18.1 | 14.04 | 13.03 | 13.5 | 26.4 | ..... | ..... | ..... | ..... | ..... |
| | 1805 | 15.6 | 14.44 | 13.43 | 15.0 | 28.3 | ..... | ..... | ..... | ..... | ..... |
| | 1806 | 15.9 | 14.44 | 13.43 | 13.8 | 27.1 | ..... | ..... | ..... | ..... | ..... |
| | 1807 | 15.0 | 14.34 | 13.33 | 16.8 | 30.0 | ..... | ..... | ..... | ..... | ..... |
| | 1808 | − 6.9 | 15.35 | 14.34 | 2.8 | 17.0 | ..... | ..... | ..... | ..... | ..... |
| | 1809 | − 9.4 | 13.23 | 12.22 | − 1.4 | 10.7 | ..... | ..... | ..... | ..... | ..... |
| | 1810 | − 7.6 | 15.35 | 14.34 | 3.8 | 18.0 | ..... | ..... | ..... | ..... | ..... |
| | 1811 | −11.9 | 14.24 | 13.23 | 2.9 | 16.0 | ..... | ..... | ..... | ..... | ..... |
| | 1812 | −17.0 | 13.94 | 12.93 | 8.6 | 31.4 | ..... | ..... | ..... | ..... | ..... |
| | 1813 | 14.1 | 14.24 | 13.23 | − 1.9 | 11.2 | ..... | ..... | ..... | ..... | ..... |
| | 1814 | 16.1 | 13.04 | 12.03 | − 3.2 | 9.7 | ..... | ..... | ..... | ..... | ..... |
| | 1815 | 24.3 | 14.34 | 13.33 | − 4.7 | 8.5 | ..... | ..... | ..... | ..... | ..... |
| | 1816 | 20.0 | 14.14 | 13.13 | 1.8 | 14.8 | ..... | ..... | ..... | ..... | ..... |
| | 1817 | 22.1 | 14.14 | 13.13 | 0.6 | 13.6 | ..... | ..... | ..... | ..... | ..... |
| | 1818 | 23.1 | 14.64 | 13.63 | 1.9 | 15.4 | ..... | ..... | ..... | ..... | ..... |
| | 1819 | 18.8 | 14.44 | 13.43 | 9.1 | 22.4 | ..... | ..... | ..... | ..... | ..... |
| | 1820 | 20.7 | 14.04 | 13.03 | 7.1 | 20.0 | ..... | ..... | ..... | ..... | ..... |
| | 1821 | 20.4 | 14.14 | 13.13 | 12.8 | 25.8 | ..... | ..... | ..... | ..... | ..... |
| | 1822 | 17.9 | 14.34 | 13.33 | 2.2 | 15.4 | ..... | ..... | ..... | ..... | ..... |
| | 1823 | 22.3 | 14.14 | 13.13 | −15.3 | − 2.3 | ..... | ..... | ..... | ..... | ..... |
| | 1824 | 24.9 | 14.74 | 13.73 | −18.5 | − 4.9 | ..... | ..... | ..... | ..... | ..... |
| | 1825 | 32.0 | 13.43 | 12.42 | −19.2 | − 6.9 | ..... | ..... | ..... | ..... | ..... |
| | 1826 | 27.1 | 14.14 | 13.13 | −21.9 | − 8.9 | ..... | ..... | ..... | ..... | ..... |
| | 1827 | 38.4 | 13.73 | 12.72 | − 3.6 | 9.0 | ..... | ..... | ..... | ..... | ..... |
| | 1828 | 22.7 | 13.94 | 13.93 | −11.9 | 0.9 | ..... | ..... | ..... | ..... | ..... |
| | 1829 | 24.6 | 14.84 | 13.83 | −13.9 | − 0.2 | ..... | ..... | ..... | ..... | ..... |
| | 1830 | 19.7 | 14.04 | 13.03 | − 8.6 | 4.3 | ..... | ..... | ..... | ..... | ..... |
| | 1831 | 10.2 | 14.34 | 13.33 | −10.8 | 2.4 | ..... | ..... | ..... | ..... | ..... |
| | 1832 | 9.9 | 14.54 | 13.53 | 0.3 | 13.7 | ..... | ..... | ..... | ..... | ..... |
| | 1833 | 7.9 | 14.44 | 13.43 | 4.6 | 17.9 | ..... | ..... | ..... | ..... | ..... |
| | 1834 | 8.3 | 14.74 | 13.73 | 11.7 | 25.3 | ..... | ..... | ..... | ..... | ..... |
| | 1835 | 6.9 | 15.05 | 14.04 | 9.3 | 23.2 | ..... | ..... | ..... | ..... | ..... |
| | 1836 | 4.6 | 14.44 | 13.43 | 7.9 | 21.2 | ..... | ..... | ..... | ..... | ..... |
| | 1837 | 6.9 | 14.95 | 13.94 | 13.9 | 27.7 | ..... | ..... | ..... | ..... | ..... |

TABLE I—*Continued*

| Plate Number and Date | Number | Latitude | Diurnal Motion | | Longitudes on Days of Observation | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sidereal | Synodic | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1543 (*cont.*) | 1838 | 4°.4 | 15°.25 | 14°.24 | 14°.8 | 28°.9 | ..... | ..... | ..... | ..... | ..... |
| | 1839 | 3.0 | 14.74 | 13.73 | 15.7 | 29.3 | ..... | ..... | ..... | ..... | ..... |
| | 1840 | 6.6 | 14.84 | 13.83 | 17.8 | 31.5 | ..... | ..... | ..... | ..... | ..... |
| | 1841 | 12.5 | 14.95 | 13.94 | 20.0 | 33.8 | ..... | ..... | ..... | ..... | ..... |
| | 1842 | 6.0 | 15.15 | 14.14 | 18.2 | 32.2 | ..... | ..... | ..... | ..... | ..... |
| | 1843 | 9.4 | 14.95 | 13.94 | 21.2 | 35.0 | ..... | ..... | ..... | ..... | ..... |
| | 1844 | −34.5 | 14.04 | 13.03 | −19.2 | − 6.3 | ..... | ..... | ..... | ..... | ..... |
| | 1845 | −37.5 | 13.13 | 12.12 | −26.3 | −14.3 | ..... | ..... | ..... | ..... | ..... |
| | 1846 | −34.2 | 14.34 | 13.33 | −15.2 | − 2.0 | ..... | ..... | ..... | ..... | ..... |
| | 1847 | −28.5 | 12.62 | 11.61 | −15.3 | − 3.8 | ..... | ..... | ..... | ..... | ..... |
| | 1848 | −32.0 | 14.34 | 13.33 | −22.0 | − 8.8 | ..... | ..... | ..... | ..... | ..... |
| | 1849 | 9.1 | 14.34 | 13.33 | −16.5 | − 3.3 | ..... | ..... | ..... | ..... | ..... |
| | 1850 | 8.6 | 15.55 | 14.54 | −27.8 | −13.4 | ..... | ..... | ..... | ..... | ..... |
| | 1851 | 10.7 | 14.44 | 13.43 | −32.5 | −19.2 | ..... | ..... | ..... | ..... | ..... |
| | 1852 | 9.3 | 13.43 | 12.42 | −43.2 | −30.9 | ..... | ..... | ..... | ..... | ..... |
| | 1853 | 16.0 | 14.34 | 13.33 | −19.9 | − 6.7 | ..... | ..... | ..... | ..... | ..... |
| | 1854 | 16.2 | 14.24 | 13.23 | −22.3 | − 9.2 | ..... | ..... | ..... | ..... | ..... |
| | 1855 | 13.9 | 14.24 | 13.23 | −28.6 | −15.5 | ..... | ..... | ..... | ..... | ..... |
| 1546 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Mar. 9, '05 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 11h05m | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 1561 | 1469 | −12.9 | 14.86 | 13.87 | 17.2 | 31.1 | 45°.9 | ..... | ..... | ..... | ..... |
| Mar. 30, '05 | 1470 | − 8.0 | 15.94 | 14.95 | 17.0 | 32.0 | ..... | ..... | ..... | ..... | ..... |
| 9h43m | 1471 | −12.3 | 14.09 | 13.10 | 15.9 | 29.2 | 43.0 | ..... | ..... | ..... | ..... |
| | 1472 | −14.8 | 14.71 | 13.72 | 15.7 | 29.5 | 44.1 | ..... | ..... | ..... | ..... |
| | 1473 | −17.7 | 14.28 | 13.29 | 17.4 | 30.7 | 44.9 | ..... | ..... | ..... | ..... |
| | 1474 | −21.5 | 13.32 | 12.33 | 11.9 | 24.0 | 37.4 | ..... | ..... | ..... | ..... |
| | 1475 | −19.8 | 13.89 | 12.90 | 7.5 | 20.8 | 34.2 | ..... | ..... | ..... | ..... |
| | 1476 | −15.0 | 14.95 | 13.96 | 5.2 | 19.4 | 34.1 | ..... | ..... | ..... | ..... |
| | 1477 | −14.5 | 14.86 | 13.87 | 3.3 | 17.0 | 32.0 | ..... | ..... | ..... | ..... |
| | 1478 | −11.4 | 14.67 | 13.68 | − 4.1 | 9.0 | 24.2 | ..... | ..... | ..... | ..... |
| | 1479 | −17.5 | 14.91 | 13.92 | − 2.9 | 11.2 | 25.9 | ..... | ..... | ..... | ..... |
| | 1480 | −18.0 | 14.33 | 13.34 | − 5.7 | 7.6 | 21.9 | ..... | ..... | ..... | ..... |
| | 1481 | −23.2 | 13.65 | 12.66 | − 2.9 | 9.9 | 23.3 | ..... | ..... | ..... | ..... |
| | 1482 | −20.5 | 14.57 | 13.58 | −10.5 | 3.0 | 17.6 | ..... | ..... | ..... | ..... |
| | 1483 | −24.2 | 13.55 | 12.56 | − 9.0 | 3.6 | ..... | ..... | ..... | ..... | ..... |
| | 1484 | −22.0 | 14.48 | 13.49 | − 7.9 | 5.2 | 20.0 | ..... | ..... | ..... | ..... |
| | 1485 | −18.6 | 13.85 | 12.86 | −13.7 | − 0.8 | ..... | ..... | ..... | ..... | ..... |
| | 1486 | −11.9 | 13.75 | 12.76 | − 9.9 | 2.9 | ..... | ..... | ..... | ..... | ..... |
| | 1487 | −12.3 | 14.43 | 13.44 | − 8.0 | 5.4 | 19.8 | ..... | ..... | ..... | ..... |
| | 1488 | −26.4 | 14.67 | 13.68 | − 9.6 | 4.0 | 18.7 | ..... | ..... | ..... | ..... |
| | 1489 | −24.2 | 14.62 | 13.63 | −12.2 | 1.0 | 16.0 | ..... | ..... | ..... | ..... |
| | 1490 | −23.2 | 14.34 | 13.35 | −14.2 | 1.1 | 13.4 | ..... | ..... | ..... | ..... |
| | 1491 | −20.3 | 14.84 | 13.85 | −13.0 | 0.9 | ..... | ..... | ..... | ..... | ..... |
| | 1492 | −25.6 | 14.04 | 13.05 | −15.0 | − 2.0 | 12.0 | ..... | ..... | ..... | ..... |
| | 1493 | −24.1 | 13.85 | 12.86 | −18.8 | − 5.9 | ..... | ..... | ..... | ..... | ..... |
| | 1494 | −17.2 | 13.85 | 12.86 | −19.3 | − 6.6 | ..... | ..... | ..... | ..... | ..... |
| | 1495 | −11.0 | 13.85 | 12.86 | −13.9 | − 1.0 | ..... | ..... | ..... | ..... | ..... |
| | 1496 | −10.7 | 14.04 | 13.05 | −18.2 | − 5.1 | ..... | ..... | ..... | ..... | ..... |
| | 1497 | −27.2 | 13.75 | 12.76 | − 3.2 | 9.6 | ..... | ..... | ..... | ..... | ..... |
| | 1498 | −27.5 | 13.89 | 12.90 | −28.0 | −15.0 | − 1.3 | ..... | ..... | ..... | ..... |
| | 1500 | 7.8 | 13.94 | 12.95 | −37.9 | −25.0 | −11.1 | ..... | ..... | ..... | ..... |
| | 1501 | 8.7 | 14.13 | 13.14 | −41.7 | −28.3 | −14.5 | ..... | ..... | ..... | ..... |
| | 1502 | 11.9 | 14.47 | 13.48 | −43.1 | −29.2 | −15.2 | ..... | ..... | ..... | ..... |
| | 1503 | 14.1 | 14.67 | 13.68 | −42.8 | −29.6 | −14.5 | ..... | ..... | ..... | ..... |
| | 1504 | 13.2 | 13.60 | 12.61 | −38.7 | −25.7 | −12.6 | ..... | ..... | ..... | ..... |
| | 1505 | 19.7 | 14.09 | 13.10 | −35.0 | −21.8 | − 7.9 | ..... | ..... | ..... | ..... |
| | 1506 | 22.5 | 14.04 | 13.05 | −35.2 | −22.3 | − 8.2 | ..... | ..... | ..... | ..... |
| | 1507 | 19.5 | 13.85 | 12.86 | −38.7 | −25.8 | ..... | ..... | ..... | ..... | ..... |
| | 1508 | 17.5 | 14.76 | 13.77 | −42.0 | −28.1 | −13.5 | ..... | ..... | ..... | ..... |
| | 1509 | 17.0 | 14.47 | 13.48 | −21.0 | − 7.6 | 6.9 | ..... | ..... | ..... | ..... |
| | 1510 | 19.7 | 14.94 | 13.95 | −20.5 | − 6.5 | ..... | ..... | ..... | ..... | ..... |
| | 1511 | 14.6 | 15.04 | 14.05 | −16.8 | − 2.7 | ..... | ..... | ..... | ..... | ..... |
| | 1512 | 21.1 | 13.74 | 12.75 | −24.9 | −11.1 | 1.5 | ..... | ..... | ..... | ..... |
| | 1513 | −14.7 | 14.43 | 13.44 | − 4.3 | 9.1 | 23.5 | ..... | ..... | ..... | ..... |
| | 1515 | 3.3 | 15.20 | 14.21 | −41.3 | −27.0 | −11.9 | ..... | ..... | ..... | ..... |

TABLE I—*Continued*

| Plate Number and Date | Number | Latitude | Diurnal Motion | | Longitudes on Days of Observation | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sidereal | Synodic | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1565 | 1474′ | −20°.6 | 13°.56 | 12°.57 | 27°.7 | 41°.1 | ..... | ..... | ..... | ..... | ..... |
| Mar. 31, '05 | 1516 | −15.6 | 14.40 | 13.41 | − 2.0 | 12.3 | ..... | ..... | ..... | ..... | ..... |
| $9^h48^m$ | 1517 | −11.7 | 14.31 | 13.32 | −17.9 | − 3.7 | ..... | ..... | ..... | ..... | ..... |
| | 1518 | −21.3 | 13.56 | 12.57 | −23.1 | − 9.7 | ..... | ..... | ..... | ..... | ..... |
| | 1519 | 12.8 | 13.65 | 12.66 | 15.0 | 28.5 | ..... | ..... | ..... | ..... | ..... |
| | 1520 | 2.8 | 15.25 | 14.26 | −37.5 | −22.3 | ..... | ..... | ..... | ..... | ..... |
| | 1521 | 7.5 | 14.31 | 13.32 | −33.6 | −19.4 | ..... | ..... | ..... | ..... | ..... |
| | 1522 | 10.4 | 14.31 | 13.32 | −33.3 | −19.1 | ..... | ..... | ..... | ..... | ..... |
| | 1523 | 14.1 | 14.22 | 13.23 | −33.4 | −19.3 | ..... | ..... | ..... | ..... | ..... |
| | 1524 | 15.0 | 14.78 | 13.79 | −34.8 | −20.1 | ..... | ..... | ..... | ..... | ..... |
| | 1525 | 16.8 | 14.78 | 13.79 | −36.8 | −22.1 | ..... | ..... | ..... | ..... | ..... |
| | 1525′ | −15.5 | 14.40 | 13.41 | 16.0 | 30.3 | ..... | ..... | ..... | ..... | ..... |
| | 1526 | 13.3 | 13.65 | 12.66 | −36.2 | −22.7 | ..... | ..... | ..... | ..... | ..... |
| | 1527 | 13.6 | 14.12 | 13.13 | −39.0 | −25.0 | ..... | ..... | ..... | ..... | ..... |
| | 1528 | 18.9 | 13.56 | 12.57 | −31.1 | −17.7 | ..... | ..... | ..... | ..... | ..... |
| | 1529 | 20.9 | 13.56 | 12.57 | −29.3 | −15.9 | ..... | ..... | ..... | ..... | ..... |
| | 1530 | 21.5 | 14.22 | 13.23 | −32.8 | −18.7 | ..... | ..... | ..... | ..... | ..... |
| | 1531 | 21.2 | 14.40 | 13.41 | −37.8 | −23.5 | ..... | ..... | ..... | ..... | ..... |
| | 1532 | 26.7 | 13.47 | 12.48 | −35.2 | −21.9 | ..... | ..... | ..... | ..... | ..... |
| | 1533 | 12.0 | 13.94 | 12.95 | −42.1 | −28.3 | ..... | ..... | ..... | ..... | ..... |
| 1572 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Apr. 1, '05 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| $11^h23^m$ | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 1588 | 1856 | −17.4 | 14.33 | 13.55 | − 7.1 | 6.0 | ..... | ..... | ..... | ..... | ..... |
| Apr. 17, '05 | 1857 | −17.6 | 14.02 | 13.04 | − 9.3 | 3.5 | ..... | ..... | ..... | ..... | ..... |
| $9^h58^m$ | 1858 | −16.1 | 14.74 | 13.76 | −11.2 | 2.3 | ..... | ..... | ..... | ..... | ..... |
| | 1859 | −14.1 | 14.43 | 13.45 | −15.2 | − 2.0 | ..... | ..... | ..... | ..... | ..... |
| | 1860 | −12.9 | 14.23 | 13.25 | −16.2 | − 3.2 | ..... | ..... | ..... | ..... | ..... |
| | 1861 | −11.2 | 14.02 | 13.04 | −14.7 | − 1.9 | ..... | ..... | ..... | ..... | ..... |
| | 1862 | −10.2 | 13.62 | 12.64 | −10.2 | 2.2 | ..... | ..... | ..... | ..... | ..... |
| | 1863 | −13.6 | 14.84 | 13.86 | 25.4 | 39.0 | ..... | ..... | ..... | ..... | ..... |
| | 1864 | − 9.2 | 13.82 | 12.84 | 21.9 | 34.5 | ..... | ..... | ..... | ..... | ..... |
| | 1865 | −10.7 | 14.64 | 13.66 | 23.7 | 37.1 | ..... | ..... | ..... | ..... | ..... |
| | 1866 | −16.3 | 14.64 | 13.66 | − 7.8 | 5.6 | ..... | ..... | ..... | ..... | ..... |
| | 1867 | 23.3 | 14.23 | 13.25 | 19.1 | 32.1 | ..... | ..... | ..... | ..... | ..... |
| | 1868 | 18.6 | 13.72 | 12.74 | 17.0 | 29.5 | ..... | ..... | ..... | ..... | ..... |
| | 1869 | 23.9 | 13.41 | 12.43 | 23.2 | 35.4 | ..... | ..... | ..... | ..... | ..... |
| | 1870 | 24.9 | 14.23 | 13.25 | 24.9 | 37.9 | ..... | ..... | ..... | ..... | ..... |
| | 1871 | 23.0 | 13.62 | 12.64 | 26.7 | 39.1 | ..... | ..... | ..... | ..... | ..... |
| | 1873 | −24.6 | 14.23 | 13.25 | 21.1 | 34.1 | ..... | ..... | ..... | ..... | ..... |
| | 1874 | −28.3 | 14.43 | 13.45 | 26.3 | 39.5 | ..... | ..... | ..... | ..... | ..... |
| | 1875 | −21.9 | 14.53 | 13.55 | 4.9 | 18.2 | ..... | ..... | ..... | ..... | ..... |
| | 1876 | −19.1 | 14.74 | 13.76 | 2.2 | 15.7 | ..... | ..... | ..... | ..... | ..... |
| | 1877 | −23.4 | 13.62 | 12.64 | 2.1 | 14.5 | ..... | ..... | ..... | ..... | ..... |
| | 1878 | −23.6 | 13.92 | 12.94 | 16.8 | 29.5 | ..... | ..... | ..... | ..... | ..... |
| | 1879 | −25.5 | 13.72 | 12.74 | 15.3 | 27.8 | ..... | ..... | ..... | ..... | ..... |
| | 1880 | −17.6 | 13.92 | 12.94 | 13.0 | 25.7 | ..... | ..... | ..... | ..... | ..... |
| | 1881 | −18.6 | 15.04 | 14.06 | 21.3 | 35.1 | ..... | ..... | ..... | ..... | ..... |
| | 1882 | −19.8 | 14.23 | 13.25 | 25.9 | 38.9 | ..... | ..... | ..... | ..... | ..... |
| | 1885 | −18.7 | 14.02 | 13.04 | −32.8 | −20.0 | ..... | ..... | ..... | ..... | ..... |
| | 1886 | −16.8 | 14.74 | 13.76 | −29.6 | −16.1 | ..... | ..... | ..... | ..... | ..... |
| | 1887 | −17.1 | 14.94 | 13.96 | −25.2 | −11.5 | ..... | ..... | ..... | ..... | ..... |
| | 1888 | −18.9 | 13.92 | 12.94 | −38.5 | −25.8 | ..... | ..... | ..... | ..... | ..... |
| | 1889 | −21.9 | 14.23 | 13.25 | −47.5 | −34.5 | ..... | ..... | ..... | ..... | ..... |
| | 1890 | −27.4 | 14.33 | 13.35 | 8.8 | 21.9 | ..... | ..... | ..... | ..... | ..... |
| 1590 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Apr. 18, '05 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| $9^h31^m$ | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 1601 | 1891 | −14.1 | 14.74 | 13.77 | 21.6 | 36.1 | ..... | ..... | ..... | ..... | ..... |
| Apr. 28, '05 | 1892 | −15.4 | 14.36 | 13.39 | 18.9 | 33.0 | ..... | ..... | ..... | ..... | ..... |
| $9^h37^m$ | 1893 | −20.6 | 14.08 | 13.11 | 14.1 | 27.9 | ..... | ..... | ..... | ..... | ..... |
| | 1894 | −20.3 | 13.79 | 12.82 | 11.8 | 25.3 | ..... | ..... | ..... | ..... | ..... |

TABLE I—*Continued*

| Plate Number and Date | Number | Latitude | Diurnal Motion | | Longitudes on Days of Observation | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sidereal | Synodic | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1601 (*cont.*) | 1895 | −23°.9 | 13°.98 | 13°.01 | 2°.2 | 15°.9 | | | | | |
| | 1896 | −26.3 | 13.89 | 12.92 | 4.3 | 17.9 | | | | | |
| | 1897 | −27.5 | 14.46 | 13.49 | 6.8 | 20.8 | | | | | |
| | 1898 | −28.5 | 14.17 | 13.20 | 9.0 | 22.9 | | | | | |
| | 1899 | −27.3 | 13.22 | 12.25 | − 9.6 | 3.3 | | | | | |
| | 1900 | −10.9 | 14.93 | 13.96 | − 3.0 | 11.7 | | | | | |
| | 1902 | 4.2 | 15.31 | 14.34 | −17.2 | − 2.1 | | | | | |
| | 1903 | 8.1 | 14.93 | 13.96 | −22.0 | − 7.3 | | | | | |
| | 1904 | 4.9 | 14.93 | 13.96 | −10.2 | 4.5 | | | | | |
| | 1905 | 11.0 | 14.46 | 13.49 | −11.1 | 3.1 | | | | | |
| | 1906 | 9.8 | 14.08 | 13.11 | −15.7 | − 1.9 | | | | | |
| | 1907 | 14.7 | 14.46 | 13.49 | −10.2 | 4.0 | | | | | |
| | 1908 | 19.1 | 14.08 | 13.11 | −19.8 | − 6.0 | | | | | |
| | 1909 | 21.6 | 14.36 | 13.39 | −18.8 | − 4.7 | | | | | |
| | 1910 | 20.8 | 13.60 | 12.63 | −11.4 | 1.9 | | | | | |
| | 1911 | 19.4 | 14.17 | 13.20 | −12.2 | 1.7 | | | | | |
| | 1912 | 10.8 | 14.65 | 13.68 | −26.8 | −12.4 | | | | | |
| | 1913 | 7.8 | 14.65 | 13.68 | −29.1 | −14.7 | | | | | |
| | 1914 | 19.9 | 14.65 | 13.68 | −38.0 | −23.6 | | | | | |
| | 1915 | 8.7 | 14.27 | 13.30 | −32.7 | −18.7 | | | | | |
| | 1916 | 11.5 | 13.51 | 12.54 | −33.2 | −20.0 | | | | | |
| | 1917 | 15.5 | 14.17 | 13.20 | −32.2 | −18.3 | | | | | |
| | 1918 | 17.7 | 15.41 | 14.44 | 30.1 | 45.3 | | | | | |
| | 1919 | 12.2 | 15.31 | 14.34 | 7.6 | 22.7 | | | | | |
| | 1920 | 10.1 | 13.89 | 12.92 | 2.4 | 16.0 | | | | | |
| | 1921 | 13.9 | 14.93 | 13.96 | 0.1 | 14.8 | | | | | |
| | 1922 | 18.7 | 14.27 | 13.30 | − 2.1 | 11.9 | | | | | |
| | 1923 | 20.0 | 13.89 | 12.92 | − 2.0 | 11.6 | | | | | |
| | 1924 | 21.8 | 14.27 | 13.30 | 1.3 | 15.3 | | | | | |
| | 1925 | 14.8 | 14.08 | 13.11 | −38.6 | −24.8 | | | | | |
| | 1926 | 16.0 | 13.98 | 13.01 | −40.7 | −27.0 | | | | | |
| | 1927 | 18.0 | 14.08 | 13.11 | −40.9 | −27.1 | | | | | |
| | 1928 | 21.3 | 13.41 | 12.44 | −44.9 | −31.8 | | | | | |
| | 1929 | 1.2 | 15.03 | 14.06 | −34.0 | −19.2 | | | | | |
| 1604 | | | | | | | | | | | |
| Apr. 29, '05 | | | | | | | | | | | |
| $10^h53^m$ | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| 1625 | 1930 | −23.1 | 14.31 | 13.36 | 27.8 | 41.1 | | | | | |
| May 26, '05 | 1931 | −25.9 | 14.31 | 13.36 | 23.5 | 36.8 | | | | | |
| $10^h10^m$ | 1932 | −27.0 | 14.01 | 13.06 | 18.5 | 31.5 | | | | | |
| | 1933 | −25.8 | 12.31 | 11.36 | 5.9 | 17.2 | | | | | |
| | 1934 | −29.8 | 13.41 | 12.46 | − 1.0 | 11.4 | | | | | |
| | 1935 | −32.0 | 13.21 | 12.26 | − 1.3 | 10.9 | | | | | |
| | 1936 | −33.2 | 12.61 | 11.66 | − 2.5 | 9.1 | | | | | |
| | 1937 | −27.9 | 13.81 | 12.86 | 12.2 | 25.0 | | | | | |
| | 1938 | − 0.1 | 14.62 | 13.67 | 6.6 | 20.2 | | | | | |
| | 1939 | 5.1 | 14.82 | 13.87 | 7.5 | 21.3 | | | | | |
| | 1940 | − 8.7 | 14.01 | 13.06 | −23.8 | −10.8 | | | | | |
| | 1941 | 6.4 | 15.02 | 14.07 | −48.7 | −34.7 | | | | | |
| | 1942 | 19.9 | 14.11 | 13.16 | −33.4 | −20.3 | | | | | |
| | 1944 | 15.1 | 14.62 | 13.67 | −23.2 | − 9.6 | | | | | |
| | 1945 | 17.0 | 14.42 | 13.47 | −22.4 | − 9.0 | | | | | |
| | 1946 | 18.3 | 15.02 | 14.07 | −21.0 | − 7.0 | | | | | |
| | 1947 | 25.2 | 14.21 | 13.26 | −19.3 | − 6.1 | | | | | |
| | 1948 | 30.7 | 13.51 | 12.56 | −20.5 | − 8.0 | | | | | |
| | 1949 | 18.2 | 14.92 | 13.97 | −18.0 | − 4.1 | | | | | |
| | 1950 | 18.2 | 14.11 | 13.16 | −15.2 | − 2.1 | | | | | |
| | 1951 | 15.1 | 14.11 | 13.16 | −17.9 | − 4.8 | | | | | |
| | 1952 | 14.0 | 13.91 | 12.96 | −20.7 | − 7.8 | | | | | |
| | 1953 | 8.7 | 15.12 | 14.17 | −17.2 | − 3.1 | | | | | |
| | 1954 | 5.3 | 14.82 | 13.87 | −14.4 | − 0.6 | | | | | |
| | 1955 | 14.4 | 14.11 | 13.16 | −10.1 | 3.0 | | | | | |
| | 1956 | 12.4 | 14.62 | 13.67 | − 9.6 | 4.0 | | | | | |
| | 1957 | 10.8 | 15.02 | 14.07 | − 8.6 | 5.4 | | | | | |
| | 1959 | 14.5 | 14.01 | 13.06 | − 7.0 | 6.0 | | | | | |
| | 1960 | 12.0 | 14.62 | 13.67 | − 1.0 | 12.6 | | | | | |

TABLE 1—*Continued*

| Plate Number and Date | Number | Latitude | Diurnal Motion | | Longitudes on Days of Observation | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sidereal | Synodic | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1625 (*cont.*) | 1961 | 8°.5 | 14°.52 | 13°.57 | − 0°.6 | 12°.9 | ..... | ..... | ..... | ..... | ..... |
| | 1962 | 16.8 | 13.31 | 12.36 | − 0.6 | 11.7 | ..... | ..... | ..... | ..... | ..... |
| | 1963 | 4.6 | 14.42 | 13.47 | − 8.8 | 4.6 | ..... | ..... | ..... | ..... | ..... |
| | 1964 | 8.3 | 14.72 | 13.77 | −10.5 | 3.2 | ..... | ..... | ..... | ..... | ..... |
| | 1965 | 17.9 | 14.52 | 13.57 | − 6.2 | 7.3 | ..... | ..... | ..... | ..... | ..... |
| | 1966 | 23.7 | 14.31 | 13.36 | 11.5 | 24.8 | ..... | ..... | ..... | ..... | ..... |
| 1626 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| May 27, '05 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 10h03m | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 1630 | 1967 | 18.8 | 13.89 | 12.94 | −10.1 | 3.1 | 16°.3 | 28°.9 | ..... | ..... | ..... |
| May 31, '05 | 1968 | 17.5 | 13.85 | 12.90 | − 9.4 | 3.5 | 16.9 | ..... | ..... | ..... | ..... |
| 10h36m | 1969 | 18.2 | 14.25 | 13.30 | − 5.9 | 7.1 | ..... | ..... | ..... | ..... | ..... |
| | 1970 | 3.6 | 14.56 | 13.61 | 2.0 | 15.3 | ..... | ..... | ..... | ..... | ..... |
| | 1971 | 2.6 | 14.97 | 14.02 | 1.3 | 15.0 | ..... | ..... | ..... | ..... | ..... |
| | 1972 | 23.3 | 14.77 | 13.82 | 33.0 | 46.5 | ..... | ..... | ..... | ..... | ..... |
| | 1973 | 26.0 | 13.33 | 12.38 | 28.3 | 40.4 | ..... | ..... | ..... | ..... | ..... |
| | 1974 | 20.1 | 14.25 | 13.30 | 32.0 | 45.0 | ..... | ..... | ..... | ..... | ..... |
| | 1975 | 19.1 | 13.54 | 12.59 | 30.3 | 42.6 | ..... | ..... | ..... | ..... | ..... |
| | 1976 | 3.2 | 14.05 | 13.10 | 3.3 | 9.5 | ..... | ..... | ..... | ..... | ..... |
| | 1977 | 21.1 | 14.13 | 13.18 | −23.9 | −11.3 | 3.3 | 15.4 | ..... | ..... | ..... |
| | 1978 | 24.4 | 13.81 | 12.86 | −21.2 | − 8.9 | 4.3 | 17.7 | ..... | 43°.2 | ..... |
| | 1979 | 26.8 | 13.95 | 13.00 | −25.2 | −12.5 | ..... | ..... | ..... | ..... | ..... |
| | 1980 | 27.6 | 14.05 | 13.10 | −27.1 | −14.3 | ..... | ..... | ..... | ..... | ..... |
| | 1981 | 14.2 | 14.36 | 13.41 | −11.5 | 1.6 | ..... | ..... | ..... | ..... | ..... |
| | 1982 | 18.5 | 14.19 | 13.24 | −14.0 | − 0.2 | 13.3 | 25.9 | ..... | ..... | ..... |
| | 1983 | 15.5 | 14.66 | 13.71 | −16.1 | − 2.7 | ..... | ..... | ..... | ..... | ..... |
| | 1984 | 13.1 | 14.20 | 13.25 | −12.2 | 0.7 | 14.8 | ..... | ..... | ..... | ..... |
| | 1985 | −11.9 | 14.34 | 13.39 | −30.8 | −17.2 | − 3.5 | ..... | ..... | ..... | ..... |
| | 1986 | 23.2 | 13.67 | 12.72 | −26.1 | −14.1 | − 0.2 | ..... | ..... | ..... | ..... |
| | 1987 | 24.3 | 14.46 | 13.51 | −29.6 | −16.4 | ..... | ..... | ..... | ..... | ..... |
| | 1988 | 25.5 | 13.64 | 12.69 | −29.4 | −17.0 | ..... | ..... | ..... | ..... | ..... |
| | 1989 | 27.0 | 14.97 | 14.02 | −33.8 | −20.1 | ..... | ..... | ..... | ..... | ..... |
| | 1991 | − 9.7 | 14.97 | 14.02 | −35.1 | −21.4 | ..... | ..... | ..... | ..... | ..... |
| | 1992 | −14.6 | 14.46 | 13.51 | −15.8 | − 2.6 | ..... | ..... | ..... | ..... | ..... |
| | 1993 | −20.3 | 14.15 | 13.20 | 5.1 | 18.0 | ..... | ..... | ..... | ..... | ..... |
| | 1994 | −27.0 | 14.04 | 13.09 | 8.0 | 22.1 | 34.7 | ..... | ..... | ..... | ..... |
| | 1995 | −23.0 | 14.66 | 13.71 | 9.6 | 23.0 | ..... | ..... | ..... | ..... | ..... |
| | 1996 | −20.2 | 13.85 | 12.90 | 10.7 | 23.3 | ..... | ..... | ..... | ..... | ..... |
| | 1997 | 0.3 | 14.66 | 13.71 | 0.6 | 14.0 | ..... | ..... | ..... | ..... | ..... |
| | 1998 | 4.0 | 15.28 | 14.33 | 16.0 | 30.0 | ..... | ..... | ..... | ..... | ..... |
| | 1999 | 31.0 | 13.37 | 12.42 | 13.5 | 25.2 | 38.8 | ..... | ..... | ..... | ..... |
| 1634 | 1990 | −20.1 | 13.87 | 12.92 | −30.1 | −16.1 | − 4.0 | ..... | ..... | ..... | ..... |
| June 1, '05 | 2000 | 28.0 | 13.49 | 12.54 | 28.3 | 41.6 | ..... | ..... | ..... | ..... | ..... |
| 10h03m | 2001 | 29.6 | 13.77 | 12.82 | −24.8 | −10.8 | 1.1 | ..... | ..... | ..... | ..... |
| | 2002 | 33.3 | 13.96 | 13.01 | −34.9 | −21.1 | ..... | ..... | ..... | ..... | ..... |
| | 2003 | 24.4 | 13.71 | 12.76 | −15.0 | − 1.6 | 10.8 | ..... | ..... | ..... | ..... |
| | 2004 | − 9.1 | 14.34 | 13.39 | −21.4 | − 7.2 | ..... | ..... | ..... | ..... | ..... |
| | 2007 | 8.4 | 14.46 | 13.51 | −44.7 | −30.2 | −17.2 | ..... | 10°.2 | 22.9 | ..... |
| | 2008 | 28.3 | 13.30 | 12.35 | 22.1 | 35.2 | ..... | ..... | ..... | ..... | ..... |
| | 2009 | 19.4 | 13.87 | 12.92 | −14.9 | − 1.2 | ..... | ..... | ..... | ..... | ..... |
| | 2010 | 19.3 | 13.71 | 12.76 | −17.4 | − 4.0 | 8.0 | ..... | 34.6 | 46.1 | ..... |
| | 2011 | 23.1 | 13.84 | 12.89 | −20.1 | − 6.6 | 6.0 | ..... | 31.8 | 44.5 | ..... |
| | 2012 | 29.7 | 13.01 | 12.06 | −28.6 | −16.2 | − 4.8 | ..... | 19.7 | 31.8 | ..... |
| | 2013 | −17.7 | 14.61 | 13.66 | −28.7 | −14.2 | − 1.0 | ..... | 26.7 | 39.6 | ..... |
| | 2014 | −22.3 | 14.01 | 13.06 | −40.9 | −27.2 | −14.5 | ..... | ..... | ..... | ..... |
| | 2015 | 10.4 | 15.10 | 14.15 | −42.9 | −27.9 | ..... | ..... | ..... | ..... | ..... |
| | 2016 | 29.3 | 13.37 | 12.42 | −37.5 | −24.3 | −12.1 | ..... | 12.8 | ..... | ..... |
| | 2016′ | 32.0 | 13.19 | 12.24 | −42.9 | −30.0 | −17.6 | ..... | 6.8 | 18.3 | ..... |
| 1640 | 2017 | 22.4 | 13.85 | 12.90 | 6.7 | 19.1 | ..... | ..... | ..... | ..... | ..... |
| June 2, '05 | 2018 | −11.7 | 14.68 | 13.73 | − 3.0 | 10.2 | ..... | ..... | ..... | ..... | ..... |
| 11h30m | 2019 | 16.9 | 13.96 | 13.01 | 13.0 | 25.5 | ..... | ..... | ..... | ..... | ..... |
| | 2020 | 20.0 | 13.99 | 13.04 | 0.4 | 12.5 | ..... | 39.3 | ..... | ..... | ..... |
| | 2021 | 19.1 | 13.85 | 12.90 | 10.8 | 23.2 | ..... | ..... | ..... | ..... | ..... |
| | 2022 | 9.1 | 14.89 | 13.94 | −33.5 | −20.1 | ..... | ..... | ..... | ..... | ..... |

TABLE I—*Continued*

| Plate Number and Date | Number | Latitude | Diurnal Motion | | Longitudes on Days of Observation | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sidereal | Synodic | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1640 (*cont.*) | 2023 | 9°0 | 14°06 | 13°11 | −35°3 | −22°7 | ..... | ..... | ..... | ..... | ..... |
| | 2024 | 8.1 | 14.16 | 13.21 | −36.5 | −23.8 | ..... | ..... | ..... | ..... | ..... |
| | 2025 | 11.5 | 14.18 | 13.23 | −40.2 | −27.7 | ..... | − 0°5 | 11°8 | ..... | ..... |
| | 2026 | −13.9 | 15.20 | 14.25 | −16.9 | − 3.2 | ..... | ..... | ..... | ..... | ..... |
| | 2027 | 11.9 | 14.28 | 13.33 | −29.1 | −16.6 | ..... | 10.6 | 23.4 | ..... | ..... |
| | 2028 | −19.1 | 14.89 | 13.94 | −19.5 | − 6.1 | ..... | ..... | ..... | ..... | ..... |
| | 2029 | 7.7 | 13.75 | 12.80 | −37.4 | −25.1 | ..... | ..... | ..... | ..... | ..... |
| | 2027′ | −17.2 | 15.31 | 14.36 | −16.9 | − 3.1 | ..... | ..... | ..... | ..... | ..... |
| 1644 | 2030 | −21.5 | 12.98 | 12.03 | −10.3 | ..... | 13°3 | 25.8 | ..... | ..... | ..... |
| June 3, '05 | 2031 | −18.4 | 13.98 | 13.03 | −13.3 | ..... | 13.0 | 25.6 | ..... | ..... | ..... |
| 10h34m | 2032 | −23.3 | 13.62 | 12.67 | −15.6 | ..... | 10.1 | ..... | ..... | ..... | ..... |
| | 2033 | 9.3 | 14.24 | 13.29 | −30.3 | ..... | − 3.1 | 9.4 | ..... | 35°6 | ..... |
| | 2034 | 11.5 | 14.68 | 13.73 | −32.1 | ..... | − 4.1 | 8.8 | ..... | ..... | ..... |
| | 2035 | 26.4 | 13.17 | 12.22 | − 0.1 | ..... | 24.7 | ..... | ..... | ..... | ..... |
| | 2036 | 23.7 | 14.02 | 13.07 | 8.0 | ..... | 34.0 | 47.1 | ..... | ..... | ..... |
| | 2037 | 26.3 | 14.01 | 13.06 | 9.2 | ..... | 35.5 | 48.2 | ..... | ..... | ..... |
| | 2038 | 14.2 | 14.65 | 13.70 | −18.6 | ..... | 9.2 | ..... | ..... | ..... | ..... |
| | 2039 | 28.4 | 12.90 | 11.95 | −10.0 | ..... | 14.8 | 25.5 | ..... | ..... | ..... |
| | 2040 | 32.4 | 14.10 | 13.15 | − 9.2 | ..... | 17.1 | 30.1 | ..... | ..... | ..... |
| | 2041 | 11.8 | 14.26 | 13.31 | −14.3 | ..... | 12.7 | ..... | ..... | ..... | ..... |
| | 2042 | 15.1 | 14.44 | 13.49 | −32.1 | ..... | − 5.3 | 7.9 | ..... | 34.7 | ..... |
| | 2043 | 17.7 | 14.32 | 13.37 | −31.5 | ..... | − 4.5 | 8.4 | ..... | ..... | ..... |
| | 2044 | 17.5 | 13.77 | 12.82 | −33.6 | ..... | − 6.9 | 5.1 | ..... | 31.4 | ..... |
| | 2045 | 16.0 | 13.86 | 12.91 | −34.4 | ..... | − 7.8 | 4.0 | ..... | ..... | ..... |
| 1648 | 2046 | 29.6 | 13.96 | 13.01 | 27.1 | 39.5 | ..... | ..... | ..... | ..... | ..... |
| June 5, '05 | 2047 | 32.1 | 13.33 | 12.38 | 27.2 | 39.0 | ..... | ..... | ..... | ..... | ..... |
| 11h16m | 2048 | 31.2 | 14.07 | 13.12 | 23.4 | 35.9 | ..... | ..... | ..... | ..... | ..... |
| | 2049 | 35.5 | 13.96 | 13.01 | 17.1 | 29.5 | ..... | ..... | ..... | ..... | ..... |
| | 2050 | 35.1 | 11.87 | 10.92 | 11.2 | 21.6 | ..... | ..... | ..... | ..... | ..... |
| | 2051 | 37.5 | 14.07 | 13.12 | 12.4 | 24.9 | ..... | ..... | ..... | ..... | ..... |
| | 2052 | 44.9 | 13.12 | 12.17 | 19.6 | 31.2 | ..... | ..... | ..... | ..... | ..... |
| | 2053 | 43.3 | 13.75 | 12.80 | 20.7 | 32.9 | ..... | ..... | ..... | ..... | ..... |
| | 2054 | 40.3 | 12.18 | 11.23 | 23.5 | 34.2 | ..... | ..... | ..... | ..... | ..... |
| | 2055 | 10.7 | 14.45 | 13.50 | 5.0 | 17.8 | ..... | 44.5 | ..... | ..... | ..... |
| | 2056 | 11.8 | 14.48 | 13.53 | 5.7 | 18.1 | ..... | 45.2 | ..... | ..... | ..... |
| | 2057 | 6.3 | 14.65 | 13.70 | 3.1 | 16.2 | ..... | 43.2 | ..... | ..... | ..... |
| | 2058 | 13.7 | 14.28 | 13.33 | − 6.5 | 6.2 | ..... | ..... | ..... | ..... | ..... |
| | 2060 | 22.4 | 13.96 | 13.01 | −23.3 | −11.2 | ..... | 14.7 | ..... | ..... | ..... |
| | 2061 | 21.5 | 14.59 | 13.64 | −18.2 | − 5.2 | ..... | ..... | ..... | ..... | ..... |
| | 2062 | 27.0 | 14.39 | 13.44 | − 6.6 | 6.0 | ..... | 32.7 | ..... | ..... | ..... |
| | 2063 | 22.7 | 14.59 | 13.64 | −35.0 | −22.0 | ..... | ..... | ..... | ..... | ..... |
| | 2064 | 12.3 | 14.14 | 13.19 | −29.7 | −17.1 | ..... | 8.9 | ..... | ..... | ..... |
| | 2065 | −22.4 | 14.38 | 14.43 | 23.1 | 35.9 | ..... | ..... | ..... | ..... | ..... |
| | 2068 | −17.3 | 14.91 | 13.96 | − 1.5 | 11.8 | ..... | ..... | ..... | ..... | ..... |
| | 2069 | − 7.7 | 14.35 | 13.40 | −41.0 | −28.3 | ..... | − 1.8 | ..... | ..... | ..... |
| | 2070 | 16.2 | 14.80 | 13.85 | − 1.0 | 12.2 | ..... | ..... | ..... | ..... | ..... |
| 1656 | 2071 | 8.9 | 14.93 | 13.98 | 20.1 | ..... | 47.7 | ..... | ..... | ..... | ..... |
| June 6, '05 | 2074 | − 4.4 | 14.53 | 13.58 | −46.9 | ..... | −20.1 | ..... | ..... | ..... | ..... |
| 10h08m | 2075 | − 7.8 | 15.34 | 14.39 | −43.2 | ..... | −14.8 | ..... | ..... | ..... | ..... |
| | 2076 | − 9.1 | 14.63 | 13.68 | −44.0 | ..... | −17.0 | ..... | ..... | ..... | ..... |
| | 2077 | 14.2 | 14.28 | 13.33 | 11.3 | ..... | 37.6 | ..... | ..... | ..... | ..... |
| 1662 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| June 8, '05 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 9h30m | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 1666 | 2078 | −11.8 | 15.03 | 14.08 | 24.2 | 35.2 | ..... | ..... | ..... | ..... | ..... |
| June 13, '05 | 2079 | −13.3 | 14.29 | 13.34 | 17.5 | 27.9 | 44.0 | ..... | ..... | ..... | ..... |
| 3h24m | 2080 | −11.4 | 14.01 | 13.06 | 15.3 | 25.5 | ..... | ..... | ..... | ..... | ..... |
| | 2081 | − 9.8 | 13.75 | 12.80 | 12.5 | 22.5 | ..... | ..... | ..... | ..... | ..... |
| | 2082 | − 8.7 | 13.88 | 12.93 | 12.2 | 22.3 | ..... | ..... | ..... | ..... | ..... |
| | 2083 | −16.8 | 14.37 | 13.42 | 17.4 | 27.4 | 44.0 | ..... | ..... | ..... | ..... |
| | 2084 | −19.5 | 14.02 | 13.07 | 17.1 | 27.6 | 43.1 | ..... | ..... | ..... | ..... |
| | 2085 | 15.1 | 14.65 | 13.70 | 19.3 | 30.0 | ..... | ..... | ..... | ..... | ..... |
| | 2086 | −17.2 | 14.90 | 13.95 | 19.3 | 30.2 | ..... | ..... | ..... | ..... | ..... |

TABLE I—*Continued*

| Plate Number and Date | Number | Latitude | Diurnal Motion | | Longitudes on Days of Observation | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sidereal | Synodic | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1666 (*cont.*) | 2087 | −23°5 | 13°73 | 12°78 | 10°1 | 20°2 | 35°5 | ..... | ..... | ..... | ..... |
| | 2088 | −18.9 | 14.33 | 13.38 | 7.2 | 17.3 | 33.8 | 44°2 | ..... | ..... | ..... |
| | 2089 | 17.2 | 14.90 | 13.95 | 26.3 | 37.2 | ..... | ..... | ..... | ..... | ..... |
| | 2090 | −23.3 | 13.89 | 12.94 | 4.8 | 14.8 | 30.5 | ..... | ..... | ..... | ..... |
| | 2091 | −21.1 | 14.14 | 13.19 | 3.5 | 13.9 | 30.1 | 40.0 | ..... | ..... | ..... |
| | 2092 | −14.9 | 14.01 | 13.06 | 3.3 | 13.5 | ..... | ..... | ..... | ..... | ..... |
| | 2093 | −15.6 | 14.38 | 13.43 | 1.4 | 11.5 | 27.5 | 38.8 | ..... | ..... | ..... |
| | 2094 | −17.7 | 14.23 | 13.28 | 1.5 | 12.0 | 27.9 | ..... | ..... | ..... | ..... |
| | 2095 | −13.9 | 14.77 | 13.82 | 0.4 | 11.2 | ..... | ..... | ..... | ..... | ..... |
| | 2096 | −20.1 | 14.39 | 13.44 | 0.4 | 10.9 | ..... | ..... | ..... | ..... | ..... |
| | 2097 | −23.2 | 14.44 | 13.49 | 0.1 | 10.4 | 26.8 | 37.5 | ..... | ..... | ..... |
| | 2098 | −18.0 | 13.24 | 12.29 | − 0.8 | 8.8 | ..... | ..... | ..... | ..... | ..... |
| | 2099 | −19.8 | 13.24 | 12.29 | − 1.3 | 8.3 | ..... | ..... | ..... | ..... | ..... |
| | 2100 | −22.2 | 13.86 | 12.91 | − 3.0 | 7.3 | 22.8 | 32.9 | ..... | ..... | ..... |
| | 2101 | −16.6 | 14.39 | 13.44 | − 3.0 | 7.5 | ..... | ..... | ..... | ..... | ..... |
| | 2102 | −13.7 | 14.70 | 13.75 | − 5.0 | 5.0 | 22.0 | 32.5 | ..... | ..... | ..... |
| | 2103 | −15.4 | 14.18 | 13.23 | − 6.8 | 3.0 | 19.3 | 29.8 | ..... | ..... | ..... |
| | 2104 | −18.9 | 13.75 | 12.80 | − 7.0 | 3.0 | ..... | ..... | ..... | ..... | ..... |
| | 2105 | −17.3 | 14.29 | 13.34 | − 8.1 | 1.1 | 17.8 | 28.7 | ..... | ..... | ..... |
| | 2106 | −17.9 | 13.24 | 12.29 | −10.4 | − 0.8 | ..... | ..... | ..... | ..... | ..... |
| | 2107 | −19.8 | 14.13 | 13.18 | −10.0 | 0.3 | ..... | ..... | ..... | ..... | ..... |
| | 2108 | −11.9 | 13.24 | 12.29 | − 9.7 | − 0.1 | ..... | ..... | ..... | ..... | ..... |
| | 2109 | −14.3 | 14.19 | 13.24 | −12.0 | − 1.7 | 14.3 | ..... | ..... | ..... | ..... |
| | 2110 | −19.7 | 14.60 | 13.65 | −14.2 | − 4.5 | 12.8 | ..... | ..... | ..... | ..... |
| | 2111 | −17.9 | 14.76 | 13.81 | −14.2 | − 4.5 | 13.0 | 23.8 | ..... | ..... | ..... |
| | 2112 | −15.8 | 14.47 | 13.52 | −14.7 | − 4.3 | 12.1 | 22.8 | ..... | ..... | ..... |
| | 2113 | −16.2 | 13.75 | 12.80 | −16.3 | − 6.3 | ..... | ..... | ..... | ..... | ..... |
| | 2114 | −16.3 | 14.17 | 13.22 | −20.2 | −10.8 | 5.9 | 16.2 | ..... | ..... | ..... |
| | 2115 | −19.0 | 14.42 | 13.47 | −19.8 | − 9.7 | 6.8 | 17.5 | ..... | ..... | ..... |
| | 2116 | 5.3 | 14.35 | 13.40 | −15.0 | − 5.1 | 11.1 | 22.2 | ..... | ..... | ..... |
| | 2117 | 7.6 | 14.79 | 13.84 | −16.2 | − 5.8 | 11.2 | 22.1 | ..... | ..... | ..... |
| | 2118 | 10.9 | 13.90 | 12.95 | −19.6 | − 9.7 | 6.1 | ..... | ..... | ..... | ..... |
| | 2119 | 8.5 | 14.29 | 13.34 | −23.9 | −13.5 | 2.6 | ..... | ..... | ..... | ..... |
| | 2120 | 5.5 | 14.76 | 13.81 | −25.7 | −16.0 | 1.0 | 12.5 | ..... | ..... | ..... |
| | 2121 | 3.0 | 14.61 | 13.66 | −26.8 | −17.2 | 0.4 | ..... | ..... | ..... | ..... |
| | 2123 | 23.7 | 13.88 | 12.93 | − 5.9 | 4.2 | ..... | ..... | ..... | ..... | ..... |
| | 2124 | 25.2 | 14.45 | 13.50 | 0.0 | 9.7 | 26.7 | ..... | ..... | ..... | ..... |
| | 2125 | 21.9 | 13.62 | 12.67 | − 4.5 | 5.4 | ..... | ..... | ..... | ..... | ..... |
| | 2126 | 20.5 | 14.65 | 13.70 | − 6.0 | 4.7 | ..... | ..... | ..... | ..... | ..... |
| | 2127 | 19.3 | 13.65 | 12.70 | − 4.0 | 5.1 | 20.8 | 31.1 | ..... | ..... | ..... |
| | 2128 | 20.7 | 13.37 | 12.42 | − 0.2 | 9.5 | ..... | ..... | ..... | ..... | ..... |
| | 2129 | 18.5 | 13.82 | 12.87 | − 2.3 | 7.6 | 23.2 | 33.4 | ..... | ..... | ..... |
| | 2130 | 15.5 | 14.23 | 13.28 | 1.9 | 11.3 | 28.0 | 38.5 | ..... | ..... | ..... |
| | 2131 | 23.7 | 14.13 | 13.18 | 14.9 | 25.2 | ..... | ..... | ..... | ..... | ..... |
| | 2132 | 21.0 | 14.02 | 13.07 | 12.7 | 23.2 | 38.7 | ..... | ..... | ..... | ..... |
| | 2133 | 21.2 | 15.29 | 14.34 | 18.5 | 29.7 | ..... | ..... | ..... | ..... | ..... |
| | 2134 | 18.1 | 15.06 | 14.11 | 14.6 | 24.6 | 42.5 | ..... | ..... | ..... | ..... |
| | 2135 | 17.0 | 14.52 | 13.57 | 17.6 | 28.2 | ..... | ..... | ..... | ..... | ..... |
| | 2136 | 14.8 | 14.01 | 13.06 | 17.8 | 28.0 | ..... | ..... | ..... | ..... | ..... |
| | 2137 | −17.8 | 15.02 | 14.07 | −12.0 | − 2.1 | 15.8 | ..... | ..... | ..... | ..... |
| | 2138 | −19.2 | 13.24 | 12.29 | −13.0 | − 3.4 | ..... | ..... | ..... | ..... | ..... |
| | 2139 | −20.7 | 13.49 | 12.54 | − 6.8 | 3.0 | ..... | ..... | ..... | ..... | ..... |
| | 2140 | −18.2 | 14.87 | 13.92 | − 6.5 | 4.3 | ..... | ..... | ..... | ..... | ..... |
| | 2141 | 16.8 | 13.74 | 12.79 | − 6.6 | 3.3 | 18.8 | ..... | ..... | ..... | ..... |
| 1668 | 2142 | −16.8 | 14.76 | 13.81 | 15.3 | 31.7 | 42.9 | ..... | ..... | ..... | ..... |
| June 14, '05 | 2143 | −14.6 | 14.57 | 13.62 | − 8.2 | 8.9 | 18.9 | ..... | ..... | ..... | ..... |
| $10^h09^m$ | 2144 | −19.3 | 15.13 | 14.18 | − 6.6 | 10.5 | 21.7 | ..... | ..... | ..... | ..... |
| | 2145 | −21.1 | 15.08 | 14.13 | − 6.9 | 10.9 | 21.2 | ..... | ..... | ..... | ..... |
| | 2146 | 1.9 | 14.47 | 13.52 | 1.6 | 17.9 | ..... | ..... | ..... | ..... | ..... |
| | 2147 | −15.8 | 14.47 | 13.52 | 22.5 | 38.8 | ..... | ..... | ..... | ..... | ..... |
| | 2148 | 21.1 | 14.06 | 13.11 | 7.2 | 23.0 | ..... | ..... | ..... | ..... | ..... |
| | 2149 | −19.4 | 14.47 | 13.52 | 3.5 | 19.8 | 30.9 | ..... | ..... | ..... | ..... |
| 1677 | 2150 | −24.9 | 14.73 | 13.78 | 37.4 | 48.3 | ..... | ..... | ..... | ..... | ..... |
| June 15, '05 | 2151 | 12.3 | 14.73 | 13.78 | 32.9 | 43.8 | ..... | ..... | ..... | ..... | ..... |
| $3^h05^m$ | 2152 | −10.2 | 14.73 | 13.78 | 12.3 | 23.2 | ..... | ..... | ..... | ..... | ..... |
| | 2153 | −21.7 | 14.48 | 13.53 | 27.0 | 37.7 | ..... | ..... | ..... | ..... | ..... |
| | 2154 | 20.2 | 13.47 | 12.52 | 30.5 | 40.4 | ..... | ..... | ..... | ..... | ..... |
| | 2155 | 23.9 | 14.86 | 13.91 | 20.2 | 31.2 | ..... | ..... | ..... | ..... | ..... |

TABLE I—*Continued*

| Plate Number and Date | Number | Latitude | Diurnal Motion | | Longitudes on Days of Observation | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sidereal | Synodic | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1677 (*cont.*) | 2156 | 11°.3 | 13°.72 | 12°.77 | −29°.2 | −19°.1 | ..... | ..... | ..... | ..... | ..... |
| | 2158 | 10.4 | 13.59 | 12.64 | −34.7 | −24.7 | ..... | ..... | ..... | ..... | ..... |
| | 2159 | 11.4 | 13.72 | 12.77 | −31.0 | −20.9 | ..... | ..... | ..... | ..... | ..... |
| | 2160 | 13.7 | 13.97 | 13.02 | −36.3 | −26.0 | ..... | ..... | ..... | ..... | ..... |
| | 2161 | 3.8 | 15.36 | 14.41 | − 6.9 | 4.5 | ..... | ..... | ..... | ..... | ..... |
| | 2162 | 21.6 | 14.35 | 13.40 | 25.7 | 36.3 | ..... | ..... | ..... | ..... | ..... |
| 1682 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| June 16, '05 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| $10^h04^m$ | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 1686 | 2163 | 14.8 | 14.99 | 14.04 | 15.0 | 28.8 | ..... | ..... | ..... | ..... | ..... |
| June 21, '05 | 2164 | 15.4 | 14.59 | 13.64 | 12.3 | 25.7 | ..... | ..... | ..... | ..... | ..... |
| $11^h00^m$ | 2165 | 12.6 | 15.20 | 14.25 | 14.0 | 28.0 | ..... | ..... | ..... | ..... | ..... |
| | 2166 | 12.7 | 14.79 | 13.84 | 17.9 | 31.5 | ..... | ..... | ..... | ..... | ..... |
| | 2167 | 18.6 | 14.89 | 13.94 | 27.3 | 41.0 | ..... | ..... | ..... | ..... | ..... |
| | 2168 | 4.8 | 15.20 | 14.25 | 31.9 | 45.9 | ..... | ..... | ..... | ..... | ..... |
| | 2169 | 2.7 | 15.60 | 14.65 | 19.0 | 33.4 | ..... | ..... | ..... | ..... | ..... |
| | 2170 | 15.0 | 14.89 | 13.94 | 4.7 | 18.4 | ..... | ..... | ..... | ..... | ..... |
| | 2171 | 14.9 | 13.91 | 12.96 | − 4.7 | 8.4 | ..... | 34°.0 | ..... | ..... | ..... |
| | 2172 | 12.2 | 14.06 | 13.11 | 0.3 | 13.2 | ..... | 39.5 | ..... | ..... | ..... |
| | 2173 | 18.7 | 14.01 | 13.06 | − 4.5 | 8.2 | ..... | 34.5 | ..... | ..... | ..... |
| | 2174 | 19.7 | 15.20 | 14.25 | 7.4 | 21.4 | ..... | ..... | ..... | ..... | ..... |
| | 2175 | 30.0 | 13.47 | 12.52 | 21.7 | 34.0 | ..... | ..... | ..... | ..... | ..... |
| | 2176 | −24.1 | 13.26 | 12.31 | 12.9 | 25.0 | ..... | ..... | ..... | ..... | ..... |
| | 2177 | −21.2 | 14.18 | 13.23 | 15.0 | 28.0 | ..... | ..... | ..... | ..... | ..... |
| | 2178 | −19.3 | 13.87 | 12.92 | 18.3 | 31.0 | ..... | ..... | ..... | ..... | ..... |
| | 2179 | −20.8 | 15.10 | 14.15 | 19.9 | 33.8 | ..... | ..... | ..... | ..... | ..... |
| | 2180 | −23.7 | 14.59 | 13.64 | 19.6 | 33.0 | ..... | ..... | ..... | ..... | ..... |
| | 2181 | −27.3 | 13.47 | 12.52 | 18.0 | 30.3 | ..... | ..... | ..... | ..... | ..... |
| | 2182 | −29.8 | 14.18 | 13.23 | 22.2 | 35.2 | ..... | ..... | ..... | ..... | ..... |
| | 2183 | −24.7 | 14.08 | 13.13 | 6.8 | 19.7 | ..... | ..... | ..... | ..... | ..... |
| | 2184 | −30.9 | 13.67 | 12.72 | 7.5 | 20.0 | ..... | ..... | ..... | ..... | ..... |
| | 2185 | −27.1 | 13.37 | 12.42 | 7.0 | 19.2 | ..... | ..... | ..... | ..... | ..... |
| | 2186 | −27.3 | 14.08 | 13.13 | 13.5 | 26.4 | ..... | ..... | ..... | ..... | ..... |
| | 2187 | −14.2 | 13.87 | 12.92 | 15.0 | 27.7 | ..... | ..... | ..... | ..... | ..... |
| | 2188 | 20.0 | 14.00 | 13.05 | −23.1 | −10.3 | ..... | 15.9 | ..... | ..... | ..... |
| | 2189 | 17.2 | 13.57 | 12.62 | −20.3 | − 7.9 | ..... | ..... | ..... | ..... | ..... |
| | 2190 | 11.3 | 15.30 | 14.35 | −17.8 | − 3.7 | ..... | ..... | ..... | ..... | ..... |
| | 2191 | 10.6 | 14.99 | 14.04 | −15.9 | − 2.1 | ..... | ..... | ..... | ..... | ..... |
| | 2192 | 11.5 | 14.09 | 13.14 | −12.1 | 0.9 | ..... | 27.2 | ..... | ..... | ..... |
| | 2193 | 8.2 | 14.38 | 13.43 | −15.7 | − 2.5 | ..... | ..... | ..... | ..... | ..... |
| | 2195 | 6.5 | 14.28 | 13.33 | − 9.5 | 3.6 | ..... | ..... | ..... | ..... | ..... |
| | 2196 | 5.2 | 14.28 | 13.33 | −19.5 | − 6.4 | ..... | ..... | ..... | ..... | ..... |
| | 2197 | 5.9 | 14.89 | 13.94 | −24.5 | −10.8 | ..... | ..... | ..... | ..... | ..... |
| | 2199 | 21.3 | 13.78 | 12.83 | −27.2 | −13.9 | ..... | 11.3 | ..... | ..... | ..... |
| | 2200 | 20.8 | 13.96 | 13.01 | −31.1 | −18.2 | ..... | 7.8 | ..... | ..... | ..... |
| | 2201 | 16.7 | 14.07 | 13.12 | −33.3 | −20.5 | ..... | 5.9 | ..... | ..... | ..... |
| | 2202 | 16.8 | 13.66 | 12.71 | −35.3 | −22.8 | ..... | 2.7 | ..... | ..... | ..... |
| | 2203 | 16.8 | 13.67 | 12.72 | −39.5 | −26.1 | ..... | − 1.3 | ..... | ..... | ..... |
| | 2204 | 19.6 | 14.09 | 13.14 | −44.1 | −31.0 | ..... | − 4.8 | ..... | ..... | ..... |
| 1689 | 2206 | 22.3 | 13.11 | 12.16 | 9.8 | ..... | 34°.2 | ..... | ..... | ..... | ..... |
| June 22, '05 | 2207 | 16.5 | 13.86 | 12.91 | 5.7 | ..... | 31.6 | ..... | ..... | ..... | ..... |
| $10^h35^m$ | 2208 | 8.4 | 13.41 | 12.46 | 5.8 | ..... | 30.8 | ..... | ..... | ..... | ..... |
| | 2209 | 5.1 | 14.61 | 13.66 | 6.1 | ..... | 33.5 | ..... | ..... | ..... | ..... |
| | 2210 | 21.6 | 14.06 | 13.11 | − 3.2 | ..... | 23.1 | ..... | ..... | ..... | ..... |
| | 2211 | 20.2 | 13.31 | 12.36 | − 5.1 | ..... | 19.7 | ..... | ..... | ..... | ..... |
| | 2212 | 18.2 | 14.31 | 13.36 | 0.9 | ..... | 27.7 | ..... | ..... | ..... | ..... |
| 1692 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| June 24, '05 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| $10^h44^m$ | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 2202 | 2213 | 4.9 | 14.36 | 13.39 | 21.4 | 35.9 | ..... | ..... | ..... | ..... | ..... |
| Apr. 26, '07 | 2214 | 7.9 | 14.92 | 13.95 | 17.8 | 32.9 | ..... | ..... | ..... | ..... | ..... |
| $9^h45^m$ | 2215 | 14.6 | 15.47 | 14.50 | 12.1 | 27.8 | ..... | ..... | ..... | ..... | ..... |

TABLE I—*Continued*

| Plate Number and Date | Number | Latitude | Diurnal Motion | | Longitudes on Days of Observation | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sidereal | Synodic | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2202 (*cont.*) | 2216 | 17°4 | 14°64 | 13°67 | 22°0 | 36°8 | ..... | ..... | ..... | ..... | ..... |
| | 2217 | 12.9 | 13.90 | 12.93 | 29.0 | 43.0 | ..... | ..... | ..... | ..... | ..... |
| | 2218 | 17.1 | 15.38 | 14.41 | 32.9 | 48.5 | ..... | ..... | ..... | ..... | ..... |
| | 2219 | 17.0 | 15.01 | 14.04 | 30.7 | 45.9 | ..... | ..... | ..... | ..... | ..... |
| | 2220 | 16.9 | 15.10 | 14.13 | 28.2 | 43.5 | ..... | ..... | ..... | ..... | ..... |
| | 2221 | 12.7 | 15.10 | 14.13 | 33.5 | 48.8 | ..... | ..... | ..... | ..... | ..... |
| | 2222 | 15.5 | 15.29 | 14.32 | 8.7 | 24.2 | ..... | ..... | ..... | ..... | ..... |
| | 2223 | 19.8 | 14.64 | 13.67 | 5.0 | 19.8 | ..... | ..... | ..... | ..... | ..... |
| | 2224 | 23.8 | 14.27 | 13.30 | 0.9 | 15.3 | ..... | ..... | ..... | ..... | ..... |
| | 2225 | 17.1 | 15.01 | 14.04 | 2.8 | 18.0 | ..... | ..... | ..... | ..... | ..... |
| | 2226 | 10.6 | 14.92 | 13.95 | 7.4 | 22.5 | ..... | ..... | ..... | ..... | ..... |
| | 2227 | 7.9 | 15.19 | 14.22 | 14.0 | 29.4 | ..... | ..... | ..... | ..... | ..... |
| | 2228 | 9.1 | 15.01 | 14.04 | 15.1 | 30.3 | ..... | ..... | ..... | ..... | ..... |
| | 2229 | 4.7 | 14.55 | 13.58 | 13.7 | 28.4 | ..... | ..... | ..... | ..... | ..... |
| | 2230 | 7.5 | 14.73 | 13.76 | 7.2 | 22.1 | ..... | ..... | ..... | ..... | ..... |
| | 2231 | 0.1 | 14.92 | 13.95 | 0.4 | 15.5 | ..... | ..... | ..... | ..... | ..... |
| | 2232 | − 0.3 | 15.10 | 14.13 | − 1.7 | 13.6 | ..... | ..... | ..... | ..... | ..... |
| | 2233 | 20.3 | 13.72 | 12.75 | − 3.8 | 10.0 | ..... | ..... | ..... | ..... | ..... |
| | 2234 | 34.9 | 13.99 | 13.02 | −12.0 | 2.1 | ..... | ..... | ..... | ..... | ..... |
| | 2235 | 38.6 | 14.09 | 13.12 | −16.0 | − 1.8 | ..... | ..... | ..... | ..... | ..... |
| | 2237 | − 8.1 | 14.46 | 13.49 | −14.2 | 0.4 | ..... | ..... | ..... | ..... | ..... |
| | 2238 | − 8.7 | 14.92 | 13.95 | −19.2 | − 4.1 | ..... | ..... | ..... | ..... | ..... |
| | 2239 | − 6.2 | 14.92 | 13.95 | −17.7 | − 2.6 | ..... | ..... | ..... | ..... | ..... |
| | 2240 | −12.6 | 14.73 | 13.76 | 33.5 | 48.4 | ..... | ..... | ..... | ..... | ..... |
| | 2241 | −16.4 | 13.53 | 12.56 | 20.0 | 33.6 | ..... | ..... | ..... | ..... | ..... |
| | 2242 | −17.2 | 14.55 | 13.58 | 18.0 | 32.7 | ..... | ..... | ..... | ..... | ..... |
| | 2243 | −16.4 | 14.64 | 13.67 | −22.2 | − 7.4 | ..... | ..... | ..... | ..... | ..... |
| | 2244 | −16.3 | 14.27 | 13.30 | −26.0 | −11.6 | ..... | ..... | ..... | ..... | ..... |
| | 2245 | −13.9 | 13.72 | 12.75 | −28.8 | −15.0 | ..... | ..... | ..... | ..... | ..... |
| | 2246 | −15.9 | 12.89 | 11.92 | −39.5 | −26.6 | ..... | ..... | ..... | ..... | ..... |
| | 2247 | −18.8 | 13.90 | 12.93 | −43.5 | −29.5 | ..... | ..... | ..... | ..... | ..... |
| | 2248 | 5.8 | 14.46 | 13.49 | −14.0 | 0.6 | ..... | ..... | ..... | ..... | ..... |
| 2208 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Apr. 27, '07 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| $11^h44^m$ | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 2209 | 2249 | 16.6 | 14.89 | 13.92 | 0.2 | 14.9 | ..... | 42°7 | ..... | ..... | ..... |
| May 1, '07 | 2250 | 18.6 | 13.98 | 13.01 | − 1.7 | 11.5 | ..... | 37.9 | ..... | ..... | ..... |
| $8^h52^m$ | 2251 | 16.7 | 14.03 | 13.06 | − 2.2 | 10.7 | ..... | 37.5 | ..... | ..... | ..... |
| | 2252 | 12.2 | 13.35 | 12.38 | − 0.1 | 12.4 | ..... | ..... | ..... | ..... | ..... |
| | 2253 | 11.1 | 13.35 | 12.38 | − 0.3 | 12.2 | ..... | ..... | ..... | ..... | ..... |
| | 2255 | 11.1 | 14.28 | 13.31 | − 5.2 | 8.2 | ..... | 35.3 | ..... | ..... | ..... |
| | 2256 | 13.5 | 14.59 | 13.62 | − 6.0 | 7.0 | ..... | 35.3 | ..... | ..... | ..... |
| | 2257 | 16.5 | 13.94 | 12.97 | − 8.5 | 4.8 | ..... | ..... | ..... | ..... | ..... |
| | 2258 | 14.0 | 14.04 | 13.07 | − 8.9 | 4.3 | ..... | ..... | ..... | ..... | ..... |
| | 2259 | 11.2 | 13.55 | 12.58 | 1.5 | 14.2 | ..... | ..... | ..... | ..... | ..... |
| | 2260 | 8.0 | 14.30 | 13.33 | − 7.0 | 6.1 | ..... | 33.5 | ..... | ..... | ..... |
| | 2261 | 19.2 | 14.54 | 13.57 | −11.7 | 2.0 | ..... | ..... | ..... | ..... | ..... |
| | 2262 | 21.5 | 13.85 | 12.88 | − 5.2 | ..... | ..... | 34.0 | ..... | ..... | ..... |
| | 2263 | 24.5 | 14.26 | 13.29 | − 8.7 | 4.9 | ..... | 31.8 | ..... | ..... | ..... |
| | 2264 | −19.5 | 14.93 | 13.96 | 15.7 | 29.8 | ..... | ..... | ..... | ..... | ..... |
| | 2265 | −20.8 | 15.03 | 14.06 | 20.4 | 34.6 | ..... | ..... | ..... | ..... | ..... |
| | 2266 | −16.9 | 14.34 | 13.37 | 22.7 | 36.2 | ..... | ..... | ..... | ..... | ..... |
| | 2267 | −20.6 | 14.84 | 13.87 | 22.8 | 36.8 | ..... | ..... | ..... | ..... | ..... |
| | 2271 | −17.2 | 14.25 | 13.28 | −11.6 | 1.7 | ..... | 28.8 | ..... | ..... | ..... |
| | 2272 | −17.0 | 13.74 | 12.77 | −13.2 | − 0.1 | ..... | 25.7 | ..... | ..... | ..... |
| | 2273 | −22.2 | 13.94 | 12.97 | − 9.0 | 2.7 | ..... | 30.2 | ..... | ..... | ..... |
| | 2274 | −22.3 | 14.18 | 13.21 | −13.8 | − 1.0 | ..... | 26.3 | ..... | ..... | ..... |
| | 2275 | −20.2 | 13.94 | 12.97 | − 4.2 | 8.0 | ..... | 35.1 | ..... | ..... | ..... |
| | 2276 | −16.1 | 14.14 | 13.17 | − 9.8 | 3.5 | ..... | ..... | ..... | ..... | ..... |
| | 2277 | −17.1 | 13.65 | 12.68 | − 8.0 | 4.8 | ..... | ..... | ..... | ..... | ..... |
| | 2278 | −12.2 | 13.45 | 12.48 | −11.8 | 0.8 | ..... | ..... | ..... | ..... | ..... |
| | 2279 | − 4.8 | 15.03 | 14.06 | −17.9 | − 3.7 | ..... | ..... | ..... | ..... | ..... |
| | 2280 | −15.0 | 13.75 | 12.78 | −21.0 | − 7.6 | ..... | 18.0 | ..... | ..... | ..... |
| | 2281 | −16.4 | 14.71 | 13.74 | −23.1 | − 9.4 | ..... | 18.7 | ..... | ..... | ..... |
| | 2282 | −14.7 | 14.50 | 13.53 | −24.1 | − 9.9 | ..... | 17.2 | ..... | ..... | ..... |
| | 2283 | −16.9 | 14.36 | 13.39 | −27.8 | −14.1 | ..... | 13.0 | ..... | ..... | ..... |
| | 2284 | −18.5 | 14.70 | 13.73 | −32.5 | −18.7 | ..... | 9.3 | ..... | ..... | ..... |

TABLE I—*Continued*

| Plate Number and Date | Number | Latitude | Diurnal Motion | | Longitudes on Days of Observation | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sidereal | Synodic | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2209 (*cont.*) | 2285 | − 7°0 | 14°25 | 13°28 | −24°7 | −10°9 | ..... | 15°8 | ..... | ..... | ..... |
| | 2286 | −10.3 | 14.54 | 13.57 | −29.7 | −16.0 | ..... | ..... | ..... | ..... | ..... |
| | 2287 | −19.4 | 14.19 | 13.22 | −36.2 | −22.5 | ..... | 4.1 | ..... | ..... | ..... |
| | 2288 | −10.5 | 14.93 | 13.96 | −24.1 | −10.0 | ..... | ..... | ..... | ..... | ..... |
| | 2289 | 13.6 | 14.20 | 13.23 | −28.9 | −15.2 | ..... | 11.8 | ..... | 37°7 | ..... |
| | 2290 | 18.1 | 13.93 | 12.96 | −29.6 | −16.2 | ..... | 9.7 | ..... | 35.8 | ..... |
| | 2291 | 14.3 | 14.26 | 13.29 | −35.6 | −22.0 | ..... | 5.2 | ..... | 31.3 | ..... |
| | 2292 | 16.9 | 13.99 | 13.02 | −24.4 | −11.4 | ..... | 15.2 | ..... | ..... | ..... |
| | 2293 | 13.0 | 14.18 | 13.21 | −24.6 | −12.0 | ..... | 14.8 | ..... | 41.8 | ..... |
| | 2294 | 10.1 | 14.04 | 13.07 | −25.4 | −12.2 | ..... | ..... | ..... | ..... | ..... |
| | 2295 | 11.9 | 14.24 | 13.27 | −27.5 | −14.1 | ..... | ..... | ..... | ..... | ..... |
| | 2296 | 8.5 | 14.64 | 13.67 | −31.1 | −17.3 | ..... | ..... | ..... | ..... | ..... |
| | 2297 | 8.5 | 14.44 | 13.47 | −32.6 | −19.0 | ..... | ..... | ..... | ..... | ..... |
| | 2298 | 7.6 | 14.04 | 13.07 | −34.3 | −20.6 | ..... | 5.5 | ..... | 31.3 | 45°1 |
| | 2299 | 29.4 | 13.73 | 12.76 | −42.2 | −30.0 | ..... | −3.5 | ..... | ..... | ..... |
| | 2300 | 18.8 | 14.10 | 13.13 | −37.0 | −24.0 | ..... | 2.9 | ..... | ..... | ..... |
| | 2301 | 31.2 | 13.84 | 12.87 | −39.0 | −26.0 | ..... | ..... | ..... | ..... | ..... |
| 2220 | 2302 | 10.8 | 14.15 | 13.18 | −18.8 | ..... | 8°0 | ..... | ..... | ..... | ..... |
| May 2, '07 | 2254 | 11.4 | 14.54 | 13.57 | 10.2 | ..... | 37.8 | ..... | ..... | ..... | ..... |
| $9^h06^m$ | | | | | | | | | | | |
| 2224 | 2302′ | 16.2 | 14.30 | 13.34 | 5.2 | ..... | 32.2 | 45.0 | ..... | ..... | ..... |
| May 4, '07 | 2303 | −21.1 | 14.44 | 13.48 | −22.4 | ..... | 4.6 | 17.9 | ..... | ..... | ..... |
| $9^h55^m$ | 2304 | −25.7 | 15.28 | 14.32 | −11.3 | ..... | 17.2 | ..... | ..... | ..... | ..... |
| | 2305 | −24.3 | 13.93 | 12.97 | −26.1 | ..... | 0.0 | 12.6 | 25°6 | ..... | ..... |
| | 2306 | −29.5 | 13.88 | 12.92 | −25.0 | ..... | 0.7 | ..... | ..... | ..... | ..... |
| | 2307 | −29.7 | 13.98 | 13.02 | −31.4 | ..... | − 5.5 | ..... | ..... | ..... | ..... |
| | 2308 | −29.3 | 14.01 | 13.05 | −34.8 | ..... | − 8.5 | 4.9 | 16.9 | ..... | ..... |
| | 2309 | −37.6 | 13.63 | 12.67 | −38.0 | ..... | −12.5 | 0.0 | 11.8 | 25.4 | ..... |
| | 2310 | −25.6 | 13.93 | 12.97 | −30.2 | ..... | − 4.4 | ..... | ..... | ..... | ..... |
| | 2311 | −21.0 | 14.53 | 13.57 | −44.8 | ..... | −17.8 | ..... | ..... | ..... | ..... |
| | 2312 | −18.4 | 14.53 | 13.57 | −42.6 | ..... | −15.6 | ..... | ..... | ..... | ..... |
| | 2313 | −17.8 | 14.50 | 13.54 | −35.4 | ..... | − 8.7 | 5.2 | ..... | ..... | ..... |
| | 2314 | −15.4 | 14.49 | 13.53 | −31.8 | ..... | − 5.3 | 8.8 | ..... | ..... | ..... |
| | 2315 | −15.0 | 14.41 | 13.45 | −46.5 | ..... | −20.2 | 7.3 | 6.7 | 20.4 | ..... |
| | 2316 | −11.6 | 14.40 | 13.44 | −41.0 | ..... | −14.1 | − 0.8 | ..... | ..... | ..... |
| | 2317 | −20.9 | 13.90 | 12.94 | −15.9 | ..... | 9.4 | 22.8 | 35.7 | ..... | ..... |
| 2226 | 2319 | 9.0 | 13.21 | 12.25 | 28.7 | 42.0 | ..... | ..... | ..... | ..... | ..... |
| May 6, '07 | 2320 | −30.3 | 14.29 | 13.33 | 3.7 | 17.5 | 30.2 | ..... | ..... | ..... | ..... |
| $9^h40^m$ | 2321 | −17.9 | 14.46 | 13.50 | −19.3 | − 6.9 | 7.1 | 20.7 | ..... | ..... | ..... |
| | 2322 | −17.1 | 13.62 | 12.66 | −27.2 | −14.5 | ..... | ..... | ..... | ..... | ..... |
| | 2323 | −17.2 | 13.32 | 12.36 | −29.2 | −16.8 | ..... | ..... | ..... | ..... | ..... |
| | 2324 | −10.9 | 14.69 | 13.73 | −35.5 | −21.5 | − 8.2 | ..... | ..... | ..... | ..... |
| | 2325 | − 6.3 | 14.47 | 13.51 | −38.8 | −25.4 | −13.1 | 1.8 | ..... | ..... | ..... |
| | 2326 | −12.5 | 14.61 | 13.65 | − 8.7 | 5.0 | ..... | ..... | ..... | ..... | ..... |
| | 2327 | −37.2 | 13.63 | 12.67 | −24.3 | −11.7 | 0.9 | ..... | ..... | ..... | ..... |
| | 2328 | 17.2 | 14.31 | 13.35 | 22.2 | 35.6 | ..... | ..... | ..... | ..... | ..... |
| | 2329 | −11.1 | 14.31 | 13.35 | 30.0 | 43.4 | ..... | ..... | ..... | ..... | ..... |
| | 2330 | −20.5 | 13.72 | 12.76 | 30.3 | 43.1 | ..... | ..... | ..... | ..... | ..... |
| | 2331 | 14.4 | 15.21 | 14.25 | 19.7 | 34.0 | ..... | ..... | ..... | ..... | ..... |
| | 2332 | 15.0 | 13.72 | 12.76 | 23.3 | 36.1 | ..... | ..... | ..... | ..... | ..... |
| | 2333 | 14.4 | 14.31 | 13.35 | 28.9 | 42.3 | ..... | ..... | ..... | ..... | ..... |
| 2238 | 2335 | −13.4 | 14.87 | 13.91 | −35.5 | −21.8 | ..... | ..... | ..... | ..... | ..... |
| May 7, '07 | 2336 | −16.2 | 14.58 | 13.62 | −36.1 | −22.8 | − 9.2 | ..... | ..... | ..... | ..... |
| $9^h45^m$ | 2337 | −13.7 | 14.88 | 13.92 | −37.7 | −24.1 | −10.2 | ..... | ..... | ..... | ..... |
| | 2338 | − 9.6 | 14.78 | 13.82 | −28.6 | −14.5 | − 1.3 | ..... | ..... | ..... | ..... |
| | 2339 | −12.5 | 14.26 | 13.30 | −39.2 | −26.1 | ..... | ..... | ..... | ..... | ..... |
| | 2340 | −13.5 | 14.26 | 13.30 | −40.4 | −27.3 | ..... | ..... | ..... | ..... | ..... |
| | 2341 | −18.1 | 14.36 | 13.40 | −34.1 | −20.9 | ..... | ..... | ..... | ..... | ..... |
| | 2342 | −34.2 | 13.76 | 12.80 | − 4.6 | 8.0 | ..... | ..... | ..... | ..... | ..... |
| | 2343 | −27.1 | 13.92 | 12.96 | 8.7 | 21.8 | 34.3 | ..... | ..... | ..... | ..... |
| | 2344 | − 8.7 | 15.58 | 14.62 | 2.0 | 16.4 | ..... | ..... | ..... | ..... | ..... |
| | 2345 | −11.9 | 14.37 | 13.41 | −23.8 | −10.8 | 2.7 | ..... | ..... | ..... | ..... |
| | 2346 | −16.8 | 14.97 | 14.01 | −26.5 | −12.7 | ..... | ..... | ..... | ..... | ..... |
| | 2347 | −18.2 | 14.77 | 13.81 | 0.4 | 14.0 | ..... | ..... | ..... | ..... | ..... |
| | 2348 | −19.2 | 15.13 | 14.17 | − 8.2 | 6.3 | 19.8 | ..... | ..... | ..... | ..... |

TABLE I—*Continued*

| Plate Number and Date | Number | Latitude | Diurnal Motion | | Longitudes on Days of Observation | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sidereal | Synodic | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2238 (*cont.*) | 2347′ | −16°.5 | 14°.67 | 13°.71 | −33°.7 | −20°.2 | ..... | ..... | ..... | ..... | ..... |
| | 2342′ | −17.6 | 13.97 | 13.01 | −12.7 | 0.2 | 13°.0 | ..... | ..... | ..... | ..... |
| 2242 | 2350 | −38.2 | 13.47 | 12.51 | 5.5 | 17.9 | ..... | ..... | ..... | ..... | ..... |
| May 8, '07 | 2351 | −15.4 | 14.28 | 13.32 | 9.9 | 23.1 | ..... | ..... | ..... | ..... | ..... |
| 9ʰ23ᵐ | 2352 | − 6.6 | 14.58 | 13.62 | 19.2 | 32.7 | ..... | ..... | ..... | ..... | ..... |
| | 2353 | −19.4 | 14.28 | 13.32 | 9.6 | 22.8 | ..... | ..... | ..... | ..... | ..... |
| | 2354 | −31.0 | 13.47 | 12.51 | 4.0 | 16.2 | ..... | ..... | ..... | ..... | ..... |
| | 2355 | −33.4 | 14.58 | 13.62 | 11.3 | 24.8 | ..... | ..... | ..... | ..... | ..... |
| | 2356 | −35.6 | 13.78 | 12.82 | 5.2 | 17.9 | ..... | ..... | ..... | ..... | ..... |
| | 2357 | −15.6 | 14.55 | 13.59 | −29.4 | −16.0 | ..... | 12°.0 | ..... | 39°.3 | ..... |
| | 2358 | 7.7 | 14.68 | 13.72 | −16.8 | − 3.2 | ..... | ..... | ..... | ..... | ..... |
| 2250 | | | | | | | | | | | |
| May 9, '07 | 2361 | −17.4 | 14.52 | 13.56 | − 7.0 | ..... | 20.6 | ..... | 48°.0 | ..... | ..... |
| 9ʰ10ᵐ | | | | | | | | | | | |
| 2258 | 2362 | −16.7 | 14.30 | 13.34 | −36.9 | ..... | −10.9 | ..... | ..... | ..... | ..... |
| May 11,' 07 | 2363 | −18.4 | 13.69 | 12.73 | −25.2 | ..... | − 0.4 | ..... | ..... | ..... | ..... |
| 11ʰ40ᵐ | 2365 | 15.9 | 14.15 | 13.19 | −26.0 | ..... | − 0.3 | ..... | ..... | ..... | ..... |
| | 2366 | 14.0 | 13.74 | 12.78 | −23.6 | ..... | 1.3 | ..... | ..... | ..... | ..... |
| 2260 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| May 13, '07 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 10ʰ26ᵐ | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 2265 | 2367 | −16.8 | 15.50 | 14.54 | 25.3 | 39.1 | ..... | ..... | ..... | ..... | ..... |
| May 17, '07 | 2368 | −16.1 | 14.34 | 13.38 | 20.5 | 33.2 | ..... | ..... | ..... | ..... | ..... |
| 10ʰ56ᵐ | 2369 | −20.8 | 15.08 | 14.12 | 29.0 | 42.4 | ..... | ..... | ..... | ..... | ..... |
| | 2370 | −20.0 | 14.76 | 13.80 | 33.0 | 46.1 | ..... | ..... | ..... | ..... | ..... |
| | 2371 | −17.6 | 14.65 | 13.69 | 36.3 | 49.3 | ..... | ..... | ..... | ..... | ..... |
| | 2372 | −17.2 | 14.65 | 13.69 | 33.8 | 46.8 | ..... | ..... | ..... | ..... | ..... |
| | 2373 | −15.5 | 14.55 | 13.59 | 31.0 | 43.9 | ..... | ..... | ..... | ..... | ..... |
| | 2374 | −23.1 | 13.60 | 12.64 | 16.9 | 28.9 | ..... | ..... | ..... | ..... | ..... |
| | 2375 | −12.9 | 14.55 | 13.59 | 2.4 | 15.3 | ..... | ..... | ..... | ..... | ..... |
| | 2376 | −13.1 | 14.55 | 13.59 | − 8.9 | 4.0 | ..... | ..... | ..... | ..... | ..... |
| | 2377 | −25.2 | 14.76 | 13.80 | − 3.5 | 9.6 | ..... | ..... | ..... | ..... | ..... |
| | 2378 | 13.6 | 14.44 | 13.48 | 0.3 | 13.1 | ..... | ..... | ..... | ..... | ..... |
| | 2379 | 4.0 | 15.39 | 14.43 | 9.3 | 23.0 | ..... | ..... | ..... | ..... | ..... |
| | 2380 | 9.7 | 16.02 | 15.06 | 5.0 | 19.3 | ..... | ..... | ..... | ..... | ..... |
| | 2381 | 6.9 | 15.39 | 14.43 | 3.8 | 17.5 | ..... | ..... | ..... | ..... | ..... |
| | 2382 | 5.7 | 15.39 | 14.43 | − 3.7 | 10.0 | ..... | ..... | ..... | ..... | ..... |
| | 2383 | 10.9 | 14.97 | 14.01 | − 6.6 | 6.7 | ..... | ..... | ..... | ..... | ..... |
| | 2384 | 18.5 | 13.52 | 12.56 | − 8.3 | 4.2 | ..... | 29.0 | ..... | ..... | ..... |
| | 2385 | 20.0 | 14.02 | 13.06 | 11.9 | 24.3 | ..... | ..... | ..... | ..... | ..... |
| | 2386 | 8.2 | 14.26 | 13.30 | −26.8 | −13.9 | ..... | 12.5 | 25.9 | ..... | ..... |
| | 2387 | 6.9 | 14.15 | 13.19 | −23.9 | −11.1 | ..... | 15.0 | 28.4 | ..... | ..... |
| | 2388 | 4.7 | 14.26 | 13.30 | −30.2 | −17.2 | ..... | 9.4 | 22.4 | ..... | ..... |
| | 2389 | 8.1 | 14.38 | 13.42 | −32.7 | −19.2 | ..... | 6.8 | 20.8 | ..... | ..... |
| | 2390 | 11.2 | 14.55 | 13.59 | −32.9 | −20.0 | ..... | ..... | ..... | ..... | ..... |
| | 2391 | 10.7 | 14.65 | 13.69 | −35.0 | −22.0 | ..... | ..... | ..... | ..... | ..... |
| | 2392 | 18.9 | 13.92 | 12.96 | −27.6 | −15.5 | ..... | 10.7 | ..... | ..... | ..... |
| | 2393 | 20.8 | 13.58 | 12.62 | −30.8 | −18.5 | ..... | 6.6 | ..... | ..... | ..... |
| | 2394 | 23.2 | 12.97 | 12.01 | −32.6 | −21.2 | ..... | ..... | ..... | ..... | ..... |
| | 2395 | −23.8 | 14.44 | 13.48 | −24.0 | −11.2 | ..... | ..... | ..... | ..... | ..... |
| | 2396 | −23.1 | 14.13 | 13.17 | −26.9 | −14.4 | ..... | ..... | ..... | ..... | ..... |
| | 2397 | 12.4 | 13.92 | 12.96 | −44.0 | −31.7 | ..... | ..... | ..... | ..... | ..... |
| | 2398 | 11.3 | 14.13 | 13.17 | −42.8 | −30.3 | ..... | ..... | ..... | ..... | ..... |
| | 2399 | 9.1 | 15.60 | 14.64 | 12.9 | 26.8 | ..... | ..... | ..... | ..... | ..... |
| 2270 | 2400 | 6.0 | 13.95 | 12.99 | −20.2 | ..... | 5.9 | ..... | ..... | ..... | ..... |
| May 18, '07 | 2401 | −18.3 | 14.91 | 13.95 | −42.9 | ..... | −15.0 | − 1.0 | ..... | ..... | ..... |
| 9ʰ43ᵐ | 2402 | 7.6 | 14.24 | 13.28 | −16.1 | ..... | 10.3 | 23.8 | ..... | ..... | ..... |
| 2275 | 2403 | 12.2 | 14.09 | 13.13 | 2.3 | 15.3 | ..... | ..... | ..... | ..... | ..... |
| May 20, '07 | 2404 | 14.8 | 14.59 | 13.63 | 1.2 | 14.7 | ..... | ..... | ..... | ..... | ..... |
| 9ʰ57ᵐ | 2405 | 8.8 | 14.29 | 13.33 | − 6.2 | 7.0 | ..... | ..... | ..... | ..... | ..... |
| | 2406 | 8.8 | 14.09 | 13.13 | −18.7 | − 5.7 | ..... | ..... | ..... | ..... | ..... |
| | 2407 | −24.6 | 14.19 | 13.23 | −23.8 | −10.7 | ..... | ..... | ..... | ..... | ..... |
| | 2408 | −14.6 | 14.09 | 13.13 | −21.8 | − 8.8 | ..... | ..... | ..... | ..... | ..... |
| | 2409 | −15.5 | 14.59 | 13.63 | −26.0 | −12.5 | ..... | ..... | ..... | ..... | ..... |
| | 2411 | −13.6 | 14.29 | 13.33 | −27.2 | −14.0 | ..... | ..... | ..... | ..... | ..... |

TABLE I—*Continued*

| Plate Number and Date | Number | Latitude | Diurnal Motion | | Longitudes on Days of Observation | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sidereal | Synodic | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2275 (*cont.*) | 2412 | −12°9 | 13°58 | 12°62 | −23°2 | −10°7 | ..... | ..... | ..... | ..... | ..... |
| | 2413 | −17.6 | 13.68 | 12.72 | −19.9 | − 7.3 | ..... | ..... | ..... | ..... | ..... |
| | 2414 | 7.8 | 13.58 | 12.62 | −22.6 | −10.1 | ..... | ..... | ..... | ..... | ..... |
| | 2415 | 9.9 | 14.19 | 13.23 | −30.4 | −17.3 | ..... | ..... | ..... | ..... | ..... |
| | 2416 | 15.5 | 14.19 | 13.23 | −28.3 | −15.2 | ..... | ..... | ..... | ..... | ..... |
| | 2417 | 8.7 | 14.39 | 13.43 | −27.6 | −14.3 | ..... | ..... | ..... | ..... | ..... |
| | 2418 | 5.7 | 14.09 | 13.13 | −28.6 | −15.6 | ..... | ..... | ..... | ..... | ..... |
| | 2419 | 4.9 | 13.99 | 13.03 | −20.2 | − 7.3 | ..... | ..... | ..... | ..... | ..... |
| | 2420 | 4.6 | 14.49 | 13.53 | −23.3 | − 9.9 | ..... | ..... | ..... | ..... | ..... |
| | 2421 | 1.8 | 14.90 | 13.94 | −28.2 | −14.4 | ..... | ..... | ..... | ..... | ..... |
| | 2422 | −12.0 | 13.78 | 12.82 | −43.4 | −30.7 | ..... | ..... | ..... | ..... | ..... |
| | 2423 | 14.0 | 14.09 | 13.13 | − 5.7 | 7.3 | ..... | ..... | ..... | ..... | ..... |
| | 2426 | −22.9 | 14.49 | 13.53 | − 4.6 | 8.8 | ..... | ..... | ..... | ..... | ..... |
| 2278 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| May 21, '07 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| $9^h43^m$ | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 2292 | 2427 | −13.0 | 14.96 | 14.01 | 34.9 | 49.0 | ..... | ..... | ..... | ..... | ..... |
| June 5, '07 | 2429 | −17.9 | 14.36 | 13.41 | 23.4 | 36.9 | ..... | ..... | ..... | ..... | ..... |
| $10^h14^m$ | 2430 | −18.8 | 14.06 | 13.11 | 21.2 | 34.4 | ..... | ..... | ..... | ..... | ..... |
| | 2431 | −19.7 | 14.96 | 14.01 | 14.4 | 28.5 | ..... | ..... | ..... | ..... | ..... |
| | 2432 | −14.3 | 14.26 | 13.31 | 20.9 | 34.3 | ..... | ..... | ..... | ..... | ..... |
| | 2433 | −21.1 | 14.26 | 13.31 | 9.8 | 23.2 | ..... | ..... | ..... | ..... | ..... |
| | 2434 | −30.8 | 13.86 | 12.91 | 21.3 | 34.3 | ..... | ..... | ..... | ..... | ..... |
| | 2435 | −33.2 | 14.16 | 13.21 | 14.6 | 27.9 | ..... | ..... | ..... | ..... | ..... |
| | 2436 | −28.6 | 13.86 | 12.91 | 9.8 | 22.8 | ..... | ..... | ..... | ..... | ..... |
| | 2437 | −36.1 | 14.56 | 13.61 | 8.3 | 22.0 | ..... | ..... | ..... | ..... | ..... |
| | 2438 | −34.4 | 13.27 | 12.32 | 6.7 | 19.1 | ..... | ..... | ..... | ..... | ..... |
| | 2439 | −35.3 | 13.27 | 12.32 | 4.0 | 16.4 | ..... | ..... | ..... | ..... | ..... |
| | 2440 | −39.6 | 13.67 | 12.72 | − 7.7 | 5.1 | ..... | ..... | ..... | ..... | ..... |
| | 2441 | −40.8 | 13.59 | 12.64 | − 5.2 | 7.9 | ..... | 32°6 | ..... | ..... | ..... |
| | 2442 | − 9.8 | 14.29 | 13.34 | 12.1 | 25.9 | ..... | 52.0 | ..... | ..... | ..... |
| | 2443 | − 6.5 | 14.75 | 13.80 | 9.3 | 23.3 | ..... | 50.5 | ..... | ..... | ..... |
| | 2444 | − 0.9 | 14.96 | 14.01 | 10.0 | 24.1 | ..... | ..... | ..... | ..... | ..... |
| | 2445 | 4.7 | 14.99 | 14.04 | 8.4 | 22.0 | ..... | 50.2 | ..... | ..... | ..... |
| | 2446 | 4.8 | 14.36 | 13.41 | 6.2 | 19.7 | ..... | ..... | ..... | ..... | ..... |
| | 2447 | 9.1 | 13.86 | 12.91 | 7.1 | 19.9 | ..... | 45.6 | ..... | ..... | ..... |
| | 2448 | 8.6 | 14.30 | 13.35 | 3.0 | 16.7 | ..... | 42.9 | ..... | ..... | ..... |
| | 2449 | 5.6 | 15.06 | 14.11 | 6.7 | 20.3 | ..... | 48.7 | ..... | ..... | ..... |
| | 2450 | − 2.2 | 14.06 | 13.11 | 4.8 | 18.0 | ..... | ..... | ..... | ..... | ..... |
| | 2451 | 0.8 | 14.58 | 13.63 | 4.2 | 18.0 | ..... | 44.9 | ..... | ..... | ..... |
| | 2452 | 3.2 | 14.36 | 13.41 | − 2.5 | 11.0 | ..... | ..... | ..... | ..... | ..... |
| | 2453 | 4.1 | 15.26 | 14.31 | − 5.7 | 8.7 | ..... | ..... | ..... | ..... | ..... |
| | 2454 | 8.3 | 14.67 | 13.72 | − 5.7 | 7.9 | ..... | 35.2 | ..... | ..... | ..... |
| | 2455 | − 2.0 | 14.16 | 13.21 | − 3.5 | 9.8 | ..... | ..... | ..... | ..... | ..... |
| | 2456 | −10.5 | 14.54 | 13.59 | 1.6 | 15.5 | ..... | 42.2 | ..... | ..... | ..... |
| | 2457 | −14.6 | 14.43 | 13.48 | 2.8 | 16.2 | ..... | 43.0 | ..... | ..... | ..... |
| | 2458 | −16.1 | 14.76 | 13.81 | − 1.9 | 12.0 | ..... | ..... | ..... | ..... | ..... |
| | 2459 | −14.7 | 14.03 | 13.08 | − 5.2 | 7.7 | ..... | 33.8 | ..... | ..... | ..... |
| | 2460 | −18.9 | 13.96 | 13.01 | −12.0 | 1.1 | ..... | ..... | ..... | ..... | ..... |
| | 2461 | −22.4 | 13.86 | 12.91 | −19.0 | − 6.0 | ..... | ..... | ..... | ..... | ..... |
| | 2462 | 13.0 | 13.96 | 13.01 | −21.0 | − 7.9 | ..... | ..... | ..... | ..... | ..... |
| | 2463 | 14.7 | 13.27 | 12.32 | −23.9 | −11:5 | ..... | ..... | ..... | ..... | ..... |
| | 2464 | 13.1 | 14.49 | 13.54 | −26.1 | −13.0 | ..... | 14.2 | ..... | ..... | ..... |
| | 2465 | 14.2 | 13.71 | 12.76 | −27.7 | −15.1 | ..... | 10.8 | ..... | ..... | ..... |
| | 2466 | 18.1 | 13.17 | 12.22 | −36.8 | −24.5 | ..... | ..... | ..... | ..... | ..... |
| | 2468 | − 9.7 | 14.32 | 13.37 | −11.4 | 2.1 | ..... | 28.5 | ..... | ..... | ..... |
| | 2469 | −11.0 | 13.95 | 13.00 | −15.9 | − 2.8 | ..... | 22.9 | ..... | ..... | ..... |
| | 2470 | −16.1 | 13.07 | 12.12 | −18.9 | − 6.7 | ..... | ..... | ..... | ..... | ..... |
| 2298 | 2472 | −18.4 | 14.85 | 13.90 | 16.1 | ..... | 43°6 | ..... | ..... | ..... | ..... |
| June 6, '07 | 2473 | −19.9 | 14.09 | 13.14 | − 2.0 | ..... | 24.0 | ..... | ..... | ..... | ..... |
| $10^h23^m5$ | 2474 | 7.9 | 15.00 | 14.05 | 10.7 | ..... | 38.5 | ..... | ..... | ..... | ..... |
| | 2475 | 2.3 | 14.75 | 13.80 | 12.2 | ..... | 39.5 | ..... | ..... | ..... | ..... |
| | 2476 | 7.0 | 14.75 | 13.80 | 5.2 | ..... | 32.5 | ..... | ..... | ..... | ..... |
| | 2477 | −18.4 | 14.25 | 13.30 | 13.0 | ..... | 39.3 | ..... | ..... | ..... | ..... |

TABLE I—*Continued*

| Plate Number and Date | Number | Latitude | Diurnal Motion | | Longitudes on Days of Observation | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sidereal | Synodic | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2301 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| June 8, '07 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| $9^h52^m$ | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 2309 | 2478 | 7°9 | 15°58 | 14°63 | 10°1 | 24°2 | ..... | ..... | ..... | ..... | ..... |
| June 13, '07 | 2479 | 7.9 | 14.75 | 13.80 | −22.5 | − 9.2 | ..... | ..... | ..... | ..... | ..... |
| $10^h37^m5$ | 2480 | 9.5 | 15.54 | 14.59 | −26.0 | −12.8 | 2°6 | ..... | ..... | ..... | ..... |
| | 2481 | 7.1 | 14.51 | 13.56 | −27.8 | −14.8 | − 1.2 | ..... | ..... | ..... | ..... |
| | 2482 | 12.7 | 14.75 | 13.80 | −28.3 | −15.0 | ..... | ..... | ..... | ..... | ..... |
| | 2484 | 9.0 | 15.06 | 14.11 | −35.6 | −22.0 | ..... | ..... | ..... | ..... | ..... |
| | 2485 | 9.3 | 14.23 | 13.28 | −30.1 | −17.3 | ..... | ..... | ..... | ..... | ..... |
| | 2486 | −15.5 | 14.87 | 13.92 | −18.0 | − 4.7 | 9.3 | ..... | ..... | ..... | ..... |
| | 2487 | −24.1 | 14.46 | 13.51 | −18.0 | − 5.1 | 8.5 | ..... | ..... | ..... | ..... |
| | 2488 | −22.4 | 14.44 | 13.49 | −12.0 | 1.0 | ..... | ..... | ..... | ..... | ..... |
| | 2489 | −18.1 | 14.51 | 13.56 | − 8.5 | 4.3 | 18.1 | ..... | ..... | ..... | ..... |
| | 2490 | −20.5 | 14.75 | 13.80 | − 5.2 | 8.1 | ..... | ..... | ..... | ..... | ..... |
| | 2491 | −18.9 | 15.06 | 14.11 | − 2.3 | 11.3 | ..... | ..... | ..... | ..... | ..... |
| | 2492 | −13.4 | 14.65 | 13.70 | − 2.4 | 10.8 | ..... | ..... | ..... | ..... | ..... |
| | 2493 | −10.9 | 15.17 | 14.22 | − 3.9 | 9.8 | ..... | ..... | ..... | ..... | ..... |
| | 2494 | −15.3 | 14.96 | 14.01 | − 4.7 | 8.8 | ..... | ..... | ..... | ..... | ..... |
| | 2495 | −12.5 | 14.51 | 13.56 | − 6.1 | 7.2 | 20.5 | ..... | ..... | ..... | ..... |
| | 2496 | − 9.9 | 14.37 | 13.42 | − 7.9 | 5.7 | 18.8 | ..... | 45°2 | ..... | ..... |
| | 2497 | −15.0 | 14.77 | 13.82 | −11.3 | 2.2 | 15.8 | ..... | ..... | ..... | ..... |
| | 2498 | −16.8 | 14.15 | 13.20 | −13.0 | − 0.2 | 12.9 | ..... | ..... | ..... | ..... |
| | 2499 | −26.7 | 14.07 | 13.12 | −33.2 | −20.6 | − 7.7 | ..... | 18.1 | 32°3 | ..... |
| | 2500 | −19.9 | 14.41 | 13.46 | −32.1 | −19.2 | − 5.7 | ..... | ..... | ..... | ..... |
| | 2501 | −16.5 | 14.51 | 13.56 | −27.9 | −15.1 | − 1.3 | ..... | ..... | ..... | ..... |
| | 2502 | −17.8 | 14.13 | 13.18 | −24.5 | −11.8 | ..... | ..... | ..... | ..... | ..... |
| | 2503 | −17.1 | 14.46 | 13.51 | −20.4 | − 7.6 | 6.1 | ..... | ..... | ..... | ..... |
| | 2478′ | 6.1 | 14.96 | 14.01 | 12.0 | 25.5 | ..... | ..... | ..... | ..... | ..... |
| 2314 | 2483 | 12.9 | 14.58 | 13.63 | −19.5 | − 5.9 | ..... | ..... | ..... | ..... | ..... |
| June 14, '07 | 2487′ | −27.3 | 13.38 | 12.43 | −11.2 | 1.2 | ..... | ..... | ..... | ..... | ..... |
| $9^h45^m$ | 2504 | 7.2 | 15.38 | 14.43 | 0.0 | 14.4 | ..... | ..... | ..... | ..... | ..... |
| | 2505 | − 7.0 | 13.88 | 12.93 | 35.5 | 48.4 | ..... | ..... | ..... | ..... | ..... |
| | 2506 | −12.8 | 13.88 | 12.93 | 12.8 | 25.7 | ..... | ..... | ..... | ..... | ..... |
| | 2507 | 8.1 | 14.98 | 14.03 | −4.0 | 10.0 | ..... | ..... | ..... | ..... | ..... |
| | 2508 | 5.5 | 14.16 | 13.21 | −15.0 | − 2.1 | ..... | 24°3 | ..... | ..... | ..... |
| | 2509 | 11.8 | 14.59 | 13.64 | −24.9 | −10.9 | ..... | 15.6 | 30.1 | ..... | ..... |
| | 2510 | 11.1 | 14.40 | 13.45 | −47.0 | −35.5 | ..... | − 7.5 | 6.1 | 20.6 | 32°8 |
| | 2511 | −24.2 | 14.28 | 13.33 | −11.8 | 0.9 | ..... | 27.7 | 41.5 | ..... | ..... |
| | 2512 | −18.5 | 14.11 | 13.16 | −16.2 | − 3.0 | ..... | 23.0 | ..... | ..... | ..... |
| 2318 | 2513 | 13.1 | 14.63 | 13.68 | − 8.5 | ..... | 18.3 | 32.8 | ..... | ..... | ..... |
| June 15, '07 | 2514 | −21.5 | 13.93 | 12.98 | − 7.4 | ..... | 18.3 | ..... | ..... | ..... | ..... |
| $9^h42^m$ | 2515 | −19.0 | 14.28 | 13.33 | 13.0 | ..... | 39.4 | ..... | ..... | ..... | ..... |
| 2324 | 2516 | 10.0 | 14.98 | 14.03 | − 1.5 | 13.0 | ..... | ..... | ..... | ..... | ..... |
| June 17, '07 | 2517 | −24.2 | 14.69 | 13.74 | 3.2 | 17.4 | ..... | ..... | ..... | ..... | ..... |
| $9^h14^m$ | 2519 | 9.8 | 14.24 | 13.29 | − 8.7 | 4.7 | 19.2 | 31.2 | ..... | ..... | ..... |
| | 2520 | −16.8 | 14.40 | 13.45 | −20.5 | − 6.6 | ..... | ..... | ..... | ..... | ..... |
| | 2521 | −21.2 | 13.92 | 12.97 | −28.5 | −15.1 | ..... | ..... | ..... | ..... | ..... |
| | 2522 | −17.8 | 14.60 | 13.65 | −30.8 | −16.7 | ..... | ..... | ..... | ..... | ..... |
| | 2523 | −17.1 | 14.53 | 13.58 | −33.2 | −19.1 | − 4.9 | 7.4 | ..... | 34.8 | ..... |
| | 2524 | −11.9 | 14.04 | 13.09 | −31.2 | −18.0 | − 3.7 | 8.0 | ..... | 34.2 | ..... |
| | 2525 | −15.3 | 14.13 | 13.18 | −36.7 | −23.0 | − 9.0 | 3.0 | ..... | ..... | ..... |
| | 2526 | −13.5 | 13.92 | 12.97 | −38.1 | −24.7 | ..... | ..... | ..... | ..... | ..... |
| | 2527 | − 9.2 | 13.82 | 12.87 | −33.3 | −20.0 | ..... | ..... | ..... | ..... | ..... |
| | 2528 | − 6.0 | 14.62 | 13.67 | −32.7 | −19.0 | − 4.5 | 8.5 | ..... | ..... | ..... |
| | 2529 | − 7.1 | 14.27 | 13.32 | −34.8 | −20.8 | − 6.7 | ..... | ..... | ..... | ..... |
| | 2530 | −15.7 | 14.19 | 13.24 | −24.9 | −10.9 | 2.7 | 15.2 | ..... | 41.4 | ..... |
| | 2531 | −10.8 | 14.18 | 13.23 | −23.8 | − 9.8 | 2.9 | 15.5 | ..... | 42.6 | ..... |
| | 2532 | −21.7 | 14.22 | 13.27 | −26.5 | −12.6 | 1.8 | 14.0 | ..... | 39.8 | ..... |
| 2329 | 2533 | 15.1 | 14.98 | 14.03 | 28.8 | 43.9 | ..... | ..... | ..... | ..... | ..... |
| June 18, '07 | 2534 | −17.5 | 14.42 | 13.47 | −23.7 | − 9.2 | ..... | ..... | ..... | ..... | ..... |
| $10^h02^m$ | 2535 | −18.7 | 13.92 | 12.97 | −14.5 | 0.0 | 11.5 | ..... | 37.1 | ..... | ..... |
| | 2536 | −13.0 | 14.18 | 13.23 | −15.0 | − 0.7 | 11.1 | ..... | ..... | ..... | ..... |

TABLE I—*Continued*

| Plate Number and Date | Number | Latitude | Diurnal Motion | | Longitudes on Days of Observation | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sidereal | Synodic | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2329 (*cont.*) | 2537 | −15°4 | 14°01 | 13°06 | −17°3 | − 3°7 | 8°5 | ..... | ..... | ..... | ..... |
| | 2538 | 15.9 | 14.51 | 13.56 | − 7.2 | 7.4 | ..... | ..... | ..... | ..... | ..... |
| | 2539 | 11.6 | 13.65 | 12.70 | −14.1 | − 1.0 | 11.0 | ..... | ..... | ..... | ..... |
| | 2540 | 3.1 | 13.58 | 12.63 | −38.9 | −25.3 | ..... | ..... | ..... | ..... | ..... |
| | 2541 | 5.5 | 14.17 | 13.22 | −43.5 | −29.3 | −17.4 | ..... | ..... | ..... | ..... |
| | 2542 | −11.4 | 15.00 | 14.05 | −41.5 | −26.3 | −13.7 | ..... | ..... | ..... | ..... |
| 2333 | 2518 | −21.8 | 14.21 | 13.26 | 20.0 | 31.9 | ..... | ..... | ..... | ..... | ..... |
| June 19, '07 | 2543 | −10.9 | 13.93 | 12.98 | − 2.5 | 9.8 | ..... | 35°2 | ..... | ..... | ..... |
| 11h52m | 2544 | −18.6 | 14.32 | 13.37 | − 6.7 | 5.3 | ..... | ..... | ..... | ..... | ..... |
| | 2545 | −13.0 | 14.85 | 13.90 | 7.6 | 19.6 | ..... | 47.7 | ..... | ..... | ..... |
| | 2546 | −11.0 | 14.66 | 13.71 | −29.0 | −16.7 | ..... | ..... | ..... | ..... | ..... |
| | 2547 | −12.9 | 14.55 | 13.60 | −30.5 | −18.3 | ..... | ..... | ..... | ..... | ..... |
| | 2548 | −12.5 | 14.55 | 13.60 | −32.2 | −20.0 | ..... | ..... | ..... | ..... | ..... |
| | 2549 | 1.9 | 14.77 | 13.82 | −31.7 | −19.3 | ..... | ..... | ..... | ..... | ..... |
| 2335 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| June 20, '07 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 9h24m | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 2339 | 2552 | −19.4 | 14.55 | 13.60 | −27.0 | ..... | 0.5 | ..... | ..... | ..... | ..... |
| June 22, '07 | | | | | | | | | | | |
| 9h18m | | | | | | | | | | | |
| 2345 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| June 24, '07 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 9h50m | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 2352 | 2553 | 12.9 | 14.20 | 13.25 | − 1.3 | 10.1 | 24.0 | 37.2 | ..... | ..... | ..... |
| June 26, '07 | 2554 | 14.3 | 13.94 | 12.99 | 22.0 | 33.7 | ..... | ..... | ..... | ..... | ..... |
| 11h50m | 2555 | −26.2 | 14.24 | 13.29 | 15.7 | 27.1 | 41.5 | ..... | ..... | ..... | ..... |
| | 2556 | −15.1 | 14.99 | 14.04 | 14.6 | 27.3 | 41.9 | ..... | ..... | ..... | ..... |
| | 2557 | −10.2 | 15.04 | 14.09 | 11.1 | 23.2 | 37.8 | 52.1 | ..... | ..... | ..... |
| | 2558 | −21.8 | 14.27 | 13.32 | 0.3 | 12.2 | 26.2 | ..... | ..... | ..... | ..... |
| | 2559 | −18.7 | 15.16 | 14.21 | − 4.6 | 8.2 | ..... | ..... | ..... | ..... | ..... |
| | 2560 | −16.8 | 15.22 | 14.27 | − 2.9 | 9.3 | 24.8 | ..... | ..... | ..... | ..... |
| | 2561 | −21.1 | 14.27 | 13.32 | − 8.7 | 3.3 | ..... | ..... | ..... | ..... | ..... |
| | 2562 | −15.8 | 13.76 | 12.81 | − 7.9 | 3.6 | 17.0 | ..... | ..... | ..... | ..... |
| | 2563 | −12.5 | 15.38 | 14.43 | 1.5 | 14.5 | ..... | ..... | ..... | ..... | ..... |
| | 2564 | − 9.2 | 14.27 | 13.32 | − 7.1 | 4.9 | ..... | ..... | ..... | ..... | ..... |
| | 2565 | − 5.0 | 14.43 | 13.48 | 5.7 | 17.7 | 31.9 | ..... | ..... | ..... | ..... |
| | 2566 | − 1.5 | 14.61 | 13.66 | 0.7 | 13.0 | ..... | ..... | ..... | ..... | ..... |
| | 2567 | − 4.7 | 13.91 | 12.96 | − 5.2 | 6.2 | 19.1 | 32.7 | ..... | ..... | ..... |
| | 2568 | 12.7 | 14.25 | 13.30 | −10.3 | 1.4 | 15.5 | 28.3 | ..... | ..... | ..... |
| | 2569 | 14.2 | 14.32 | 13.37 | −10.1 | 2.1 | 15.9 | ..... | ..... | ..... | ..... |
| | 2570 | 15.8 | 14.45 | 13.50 | −11.9 | 0.3 | 14.3 | 27.3 | ..... | ..... | ..... |
| | 2571 | 17.5 | 14.00 | 13.05 | −16.1 | − 3.7 | 9.3 | ..... | ..... | ..... | ..... |
| | 2572 | 25.0 | 13.72 | 12.77 | −13.7 | − 2.2 | ..... | ..... | ..... | ..... | ..... |
| | 2573 | 10.8 | 14.50 | 13.55 | −14.2 | − 2.0 | ..... | ..... | ..... | ..... | ..... |
| | 2574 | 13.4 | 14.17 | 13.22 | −14.7 | − 2.7 | 11.0 | ..... | ..... | ..... | ..... |
| | 2575 | 16.7 | 14.38 | 13.43 | −20.3 | − 8.2 | ..... | ..... | ..... | ..... | ..... |
| | 2576 | 13.2 | 14.38 | 13.43 | −25.0 | −12.9 | ..... | ..... | ..... | ..... | ..... |
| | 2577 | 19.3 | 13.72 | 12.77 | − 9.6 | 1.9 | ..... | ..... | ..... | ..... | ..... |
| | 2578 | − 7.7 | 14.58 | 13.63 | −30.8 | −18.4 | − 4.3 | ..... | ..... | ..... | ..... |
| | 2579 | −12.0 | 14.61 | 13.66 | −15.2 | − 2.9 | ..... | ..... | ..... | ..... | ..... |
| 2353 | 2580 | − 5.7 | 14.56 | 13.61 | − 2.3 | 11.9 | ..... | ..... | ..... | ..... | ..... |
| June 27, '07 | 2581 | − 6.1 | 14.79 | 13.84 | 9.0 | 23.5 | 36.8 | ..... | ..... | ..... | ..... |
| 9h27m | 2582 | 13.9 | 14.25 | 13.30 | 9.6 | 23.5 | 36.3 | ..... | ..... | ..... | ..... |
| | 2583 | −10.8 | 14.49 | 13.54 | 2.6 | 16.8 | 29.8 | ..... | ..... | ..... | ..... |
| | 2584 | 22.7 | 13.84 | 12.89 | − 4.9 | 8.3 | 21.0 | ..... | ..... | ..... | ..... |
| | 2585 | 21.8 | 13.90 | 12.95 | − 7.7 | 5.8 | 18.3 | ..... | ..... | ..... | ..... |
| 2358 | 2586 | −23.6 | 13.17 | 12.22 | 18.3 | 30.1 | ..... | ..... | ..... | ..... | ..... |
| June 28, '07 | 2587 | −21.4 | 14.83 | 13.88 | 13.5 | 26.9 | ..... | ..... | ..... | ..... | ..... |
| 10h29m | 2588 | 11.3 | 15.14 | 14.19 | 12.7 | 26.4 | ..... | ..... | ..... | ..... | ..... |
| | 2589 | 11.9 | 14.83 | 13.88 | 11.0 | 24.4 | ..... | ..... | ..... | ..... | ..... |

TABLE I—*Continued*

| Plate Number and Date | Number | Latitude | Diurnal Motion | | Longitudes on Days of Observation | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sidereal | Synodic | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2358 (*cont.*) | 2590 | 15°4 | 12°86 | 11°91 | 4°6 | 16°1 | ..... | ..... | ..... | ..... | ..... |
| | 2591 | 15.8 | 14.73 | 13.78 | 21.2 | 34.5 | ..... | ..... | ..... | ..... | ..... |
| | 2592 | 33.4 | 14.52 | 13.57 | 9.9 | 23.0 | ..... | ..... | ..... | ..... | ..... |
| | 2593 | 38.0 | 14.21 | 13.26 | 14.8 | 27.6 | ..... | ..... | ..... | ..... | ..... |
| | 2594 | 4.8 | 14.73 | 13.78 | −37.0 | 23.7 | ..... | ..... | ..... | ..... | ..... |
| | 2595 | −17.4 | 14.67 | 13.72 | −37.1 | −24.1 | ..... | 2°6 | 16°1 | 34°5 | ..... |
| | 2596 | −19.1 | 14.00 | 13.05 | −31.0 | −18.4 | ..... | ..... | ..... | ..... | ..... |
| | 2597 | −23.1 | 14.42 | 13.47 | −33.5 | −20.5 | ..... | ..... | ..... | ..... | ..... |
| | 2598 | −23.4 | 14.34 | 13.39 | −36.0 | −23.0 | ..... | 3.5 | ..... | ..... | ..... |
| | 2599 | 3.1 | 14.67 | 13.72 | −30.0 | −16.7 | ..... | 10.5 | 24.3 | 41.1 | ..... |
| 2361 | 2600 | −19.9 | 15.12 | 14.17 | −30.1 | ..... | − 2°0 | ..... | ..... | ..... | ..... |
| June 29, '07 | 2601 | −21.5 | 15.07 | 14.12 | −28.7 | ..... | − 0.7 | ..... | ..... | ..... | ..... |
| 9h39m | | | | | | | | | | | |
| 2365 | 2602 | −18.8 | 14.82 | 13.87 | 0.2 | 13.5 | 31.2 | ..... | ..... | ..... | ..... |
| July 1, '07 | 2603 | −15.2 | 14.65 | 13.70 | 0.6 | 13.5 | 31.2 | ..... | ..... | ..... | ..... |
| 9h14m | 2604 | −12.1 | 14.12 | 13.17 | − 2.0 | 11.2 | ..... | ..... | ..... | ..... | ..... |
| | 2605 | −13.0 | 14.41 | 13.46 | − 6.0 | 7.1 | 24.1 | ..... | ..... | ..... | ..... |
| | 2606 | −14.8 | 14.65 | 13.70 | − 8.1 | 4.9 | 22.5 | ..... | ..... | ..... | ..... |
| | 2607 | −17.5 | 15.04 | 14.09 | − 9.8 | 3.8 | 21.7 | ..... | ..... | ..... | ..... |
| | 2608 | −14.2 | 14.82 | 13.87 | −17.0 | − 3.7 | 14.0 | ..... | ..... | ..... | ..... |
| | 2609 | −17.0 | 14.62 | 13.67 | −17.0 | − 3.3 | ..... | ..... | ..... | ..... | ..... |
| | 2610 | 5.2 | 15.13 | 14.18 | 5.6 | 19.5 | 37.3 | ..... | ..... | ..... | ..... |
| | 2611 | 5.2 | 14.31 | 13.36 | − 1.8 | 11.8 | 28.1 | ..... | ..... | ..... | ..... |
| | 2612 | 2.1 | 14.72 | 13.77 | − 0.5 | 13.3 | ..... | ..... | ..... | ..... | ..... |
| | 2613 | 11.9 | 15.07 | 14.12 | −43.5 | −29.2 | −11.9 | ..... | ..... | ..... | ..... |
| | 2614 | 6.5 | 14.62 | 13.67 | −43.2 | −29.5 | ..... | ..... | ..... | ..... | ..... |
| 2369 | 2615 | −21.5 | 15.03 | 14.08 | 11.8 | 29.2 | ..... | ..... | ..... | ..... | ..... |
| July 2, '07 | 2616 | −18.2 | 14.87 | 13.92 | − 1.9 | 15.3 | ..... | ..... | ..... | ..... | ..... |
| 9h17m | 2617 | −20.4 | 14.71 | 13.76 | 19.1 | 36.1 | ..... | ..... | ..... | ..... | ..... |
| | 2618 | −33.7 | 14.55 | 13.60 | −20.0 | − 3.2 | ..... | ..... | ..... | ..... | ..... |
| | 2619 | −15.7 | 15.19 | 14.24 | −21.3 | − 3.7 | ..... | ..... | ..... | ..... | ..... |
| | 2620 | −18.1 | 14.71 | 13.76 | −19.1 | − 2.1 | ..... | ..... | ..... | ..... | ..... |
| | 2621 | −26.5 | 15.19 | 14.24 | 2.0 | 19.6 | ..... | ..... | ..... | ..... | ..... |
| | 2622 | −27.3 | 15.19 | 14.24 | − 0.7 | 16.9 | ..... | ..... | ..... | ..... | ..... |
| | 2623 | −31.8 | 14.71 | 13.76 | − 3.8 | 13.2 | ..... | ..... | ..... | ..... | ..... |
| | 2624 | −34.6 | 14.71 | 13.76 | −13.1 | 3.9 | ..... | ..... | ..... | ..... | ..... |
| | 2625 | −38.9 | 14.71 | 13.76 | −14.0 | 3.0 | ..... | ..... | ..... | ..... | ..... |
| 2375 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| July 3, '07 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 2h56m | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 2401 | 2626 | −13.4 | 15.17 | 14.21 | 15.5 | 28.4 | ..... | ..... | ..... | ..... | ..... |
| July 26, '07 | 2627 | −10.9 | 15.72 | 14.76 | 16.2 | 29.6 | ..... | ..... | ..... | ..... | ..... |
| 11h28m | 2628 | −15.3 | 15.83 | 14.87 | 24.3 | 37.8 | ..... | ..... | ..... | ..... | ..... |
| | 2629 | −10.8 | 14.73 | 13.77 | 7.6 | 20.1 | ..... | ..... | ..... | ..... | ..... |
| | 2630 | − 7.8 | 15.17 | 14.21 | 5.6 | 18.5 | ..... | ..... | ..... | ..... | ..... |
| | 2631 | − 3.2 | 13.96 | 13.00 | 7.4 | 19.2 | ..... | ..... | ..... | ..... | ..... |
| | 2632 | −10.9 | 13.63 | 12.67 | 1.7 | 13.2 | ..... | ..... | ..... | ..... | ..... |
| | 2633 | −10.6 | 14.51 | 13.55 | − 2.5 | 9.8 | ..... | ..... | ..... | ..... | ..... |
| | 2634 | − 8.9 | 15.06 | 14.10 | −12.8 | 0.0 | ..... | ..... | ..... | ..... | ..... |
| | 2635 | 16.9 | 15.61 | 14.65 | 5.5 | 18.8 | ..... | ..... | ..... | ..... | ..... |
| | 2636 | 18.2 | 14.51 | 13.55 | 19.7 | 32.0 | ..... | ..... | ..... | ..... | ..... |
| | 2637 | 20.9 | 14.18 | 13.22 | 19.9 | 31.9 | ..... | ..... | ..... | ..... | ..... |
| | 2638 | 23.8 | 14.51 | 13.55 | 21.6 | 33 9 | ..... | ..... | ..... | ..... | ..... |
| | 2639 | 0.7 | 14.40 | 13.44 | −11.3 | 0.9 | ..... | ..... | ..... | ..... | ..... |
| | 2640 | 7.8 | 14.50 | 13.54 | −38.0 | −25.4 | ..... | 1.3 | 14.8 | 30.0 | 43°5 |
| | 2641 | 9.8 | 14.84 | 13.88 | −40.5 | −27.9 | ..... | ..... | ..... | ..... | ..... |
| | 2642 | − 3.2 | 13.74 | 12.78 | 5.3 | 16.9 | ..... | ..... | ..... | ..... | ..... |
| | 2643 | 6.3 | 15.17 | 14.21 | −11.9 | 1.0 | ..... | ..... | ..... | ..... | ..... |
| 2403 | 2644 | −29.6 | 13.96 | 13.00 | −25.0 | ..... | 0.6 | 14.1 | 27.0 | 41.8 | ..... |
| July 27, '07 | | | | | | | | | | | |
| 9h15m | | | | | | | | | | | |

TABLE I—*Continued*

| Plate Number and Date | Number | Latitude | Diurnal Motion | | Longitudes on Days of Observation | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sidereal | Synodic | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2406 | 2645 | −28°.0 | 14°.06 | 13°.10 | 4°.9 | 17°.2 | 32°.2 | ..... | ..... | ..... | ..... |
| July 29, '07 | 2646 | −29.6 | 14.34 | 13.38 | 5.1 | 18.3 | 33.0 | ..... | ..... | ..... | ..... |
| $9^h45^m$ | 2647 | −15.6 | 15.14 | 14.18 | 2.5 | 16.3 | ..... | ..... | ..... | ..... | ..... |
| | 2648 | −12.1 | 14.92 | 13.96 | 1.7 | 15.5 | 30.8 | ..... | ..... | ..... | ..... |
| | 2649 | −32.2 | 13.48 | 12.52 | − 1.1 | 11.5 | 25.0 | ..... | ..... | ..... | ..... |
| | 2650 | 2.4 | 14.32 | 13.36 | 24.7 | 37.7 | ..... | ..... | ..... | ..... | ..... |
| | 2651 | 6.7 | 13.81 | 12.85 | 26.8 | 39.3 | ..... | ..... | ..... | ..... | ..... |
| | 2652 | −14.8 | 14.53 | 13.57 | 12.8 | 26.0 | ..... | ..... | ..... | ..... | ..... |
| | 2653 | 10.8 | 14.70 | 13.74 | − 9.0 | 4.8 | 19.9 | 33°.4 | ..... | ..... | ..... |
| | 2654 | 8.4 | 14.67 | 13.71 | − 8.4 | 4.5 | 20.1 | 33.7 | ..... | ..... | ..... |
| | 2655 | 9.9 | 14.55 | 13.59 | − 4.9 | 8.3 | 23.3 | 37.0 | ..... | ..... | ..... |
| | 2656 | 4.9 | 14.66 | 13.70 | − 6.4 | 7.3 | 22.3 | 35.9 | ..... | ..... | ..... |
| | 2657 | 3.4 | 14.05 | 13.09 | − 0.9 | 11.4 | 26.4 | ..... | ..... | ..... | ..... |
| | 2658 | 1.3 | 14.72 | 13.76 | − 1.9 | 11.8 | 26.8 | ..... | ..... | ..... | ..... |
| | 2659 | 5.7 | 14.42 | 13.46 | 1.6 | 14.7 | ..... | ..... | ..... | ..... | ..... |
| | 2660 | − 8.9 | 14.01 | 13.05 | − 4.8 | 7.9 | ..... | ..... | ..... | ..... | ..... |
| | 2661 | 8.6 | 14.53 | 13.57 | −39.1 | −25.9 | ..... | ..... | ..... | ..... | ..... |
| | 2662 | − 0.2 | 14.84 | 13.88 | −39.7 | −26.2 | ..... | ..... | ..... | ..... | ..... |
| | 2663 | 3.5 | 13.63 | 12.67 | −38.4 | −26.2 | −12.0 | ..... | ..... | ..... | ..... |
| | 2664 | 22.4 | 13.92 | 12.96 | −36.2 | −23.6 | − 9.2 | ..... | ..... | ..... | ..... |
| | 2665 | 14.7 | 14.01 | 13.05 | − 0.4 | 12.2 | 26.7 | 39.8 | ..... | ..... | ..... |
| 2411 | 2666 | 7.9 | 15.40 | 14.44 | 1.3 | 17.0 | 30.9 | 42.8 | ..... | ..... | ..... |
| July 30, '07 | 2668 | 0.4 | 14.73 | 13.77 | −29.0 | −13.7 | ..... | ..... | ..... | ..... | ..... |
| $9^h06^m$ | 2669 | 5.8 | 14.90 | 13.94 | 10.8 | 26.2 | 40.2 | ..... | ..... | ..... | ..... |
| | 2670 | 5.8 | 14.72 | 13.76 | 8.8 | 24.1 | 37.8 | ..... | ..... | ..... | ..... |
| | 2671 | 2.6 | 14.16 | 13.20 | −35.2 | −20.7 | − 7.3 | 5.2 | 17°.7 | ..... | ..... |
| | 2672 | 3.2 | 14.38 | 13.42 | −39.8 | −25.1 | −11.6 | 1.0 | 14.1 | ..... | ..... |
| | 2673 | 0.7 | 14.49 | 13.53 | −31.6 | −16.1 | − 3.2 | 11.1 | 22.3 | ..... | ..... |
| | 2674 | 6.7 | 14.58 | 13.62 | −33.0 | −17.9 | − 5.1 | 8.7 | ..... | ..... | ..... |
| | 2675 | 13.8 | 14.48 | 13.52 | −32.1 | −17.0 | − 3.6 | ..... | ..... | ..... | ..... |
| | 2676 | − 3.3 | 14.23 | 13.27 | −36.8 | −23.1 | − 9.1 | 3.5 | 16.1 | ..... | ..... |
| 2417 | 2677 | −13.9 | 14.60 | 13.64 | 28.5 | 42.1 | ..... | ..... | ..... | ..... | ..... |
| July 31, '07 | 2679 | − 6.0 | 14.50 | 13.54 | −16.5 | − 3.0 | ..... | ..... | ..... | ..... | ..... |
| $11^h46^m$ | 2680 | − 6.8 | 14.74 | 13.78 | −29.7 | −16.0 | − 2.7 | 10.3 | ..... | ..... | ..... |
| | 2681 | −11.0 | 14.35 | 13.39 | −34.4 | −21.0 | − 8.5 | 4.6 | ..... | ..... | ..... |
| | 2682 | − 5.7 | 14.85 | 13.89 | −34.0 | −20.3 | − 6.9 | 6.3 | ..... | ..... | ..... |
| | 2683 | −12.2 | 14.40 | 13.44 | −38.1 | −24.7 | ..... | ..... | ..... | ..... | ..... |
| | 2684 | − 7.8 | 14.74 | 13.78 | −40.2 | −27.0 | −13.6 | ..... | ..... | ..... | ..... |
| | 2685 | 9.2 | 13.95 | 12.99 | −25.9 | −12.9 | − 1.0 | 12.0 | ..... | ..... | ..... |
| | 2686 | 8.0 | 14.33 | 13.37 | −32.2 | −18.9 | − 6.4 | ..... | ..... | ..... | ..... |
| | 2687 | 4.6 | 14.02 | 13.06 | −31.3 | −18.1 | − 6.1 | 6.8 | ..... | ..... | ..... |
| | 2688 | 4.0 | 14.50 | 13.54 | −26.9 | −13.4 | ..... | ..... | ..... | ..... | ..... |
| 2420 | 2678 | − 3.3 | 14.48 | 13.52 | −11.0 | 1.6 | 14.9 | ..... | ..... | ..... | ..... |
| Aug. 1, '07 | 2689 | − 6.5 | 14.53 | 13.57 | − 9.8 | 3.3 | 16.2 | ..... | ..... | ..... | ..... |
| $11^h42^m$ | 2690 | −11.5 | 14.64 | 13.68 | −28.5 | −15.8 | − 2.3 | ..... | ..... | ..... | ..... |
| | 2691 | −13.6 | 14.27 | 13.31 | −31.4 | −18.8 | − 5.9 | ..... | ..... | ..... | ..... |
| | 2692 | − 9.2 | 14.69 | 13.73 | −24.4 | −11.6 | ..... | ..... | ..... | ..... | ..... |
| | 2693 | −14.1 | 14.74 | 13.78 | −21.6 | − 8.6 | 4.8 | ..... | ..... | ..... | ..... |
| | 2694 | −19.2 | 15.34 | 14.38 | 21.8 | 35.2 | ..... | ..... | ..... | ..... | ..... |
| | 2695 | 10.7 | 14.59 | 13.63 | −19.6 | − 6.9 | ..... | ..... | ..... | ..... | ..... |
| 2423 | 2696 | 9.6 | 13.98 | 13.02 | − 4.0 | 8.8 | ..... | ..... | ..... | ..... | ..... |
| Aug. 2, '07 | 2697 | 11.0 | 14.38 | 13.42 | − 5.3 | 7.9 | ..... | ..... | ..... | ..... | ..... |
| $10^h04^m$ | 2698 | − 8.0 | 14.38 | 13.42 | −21.0 | − 7.8 | ..... | ..... | ..... | ..... | ..... |
| | 2699 | − 6.6 | 13.98 | 13.02 | −18.4 | − 5.6 | ..... | ..... | ..... | ..... | ..... |
| | 2701 | 1.2 | 14.38 | 13.42 | 12.0 | 26.2 | ..... | ..... | ..... | ..... | ..... |
| | 2702 | − 5.0 | 15.09 | 14.13 | −12.8 | 1.1 | ..... | ..... | ..... | ..... | ..... |
| | 2703 | − 2.9 | 14.69 | 13.73 | −14.5 | −1.0 | ..... | ..... | ..... | ..... | ..... |
| 2427 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Aug. 3, '07 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| $9^h40^m$ | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |

TABLE I—*Continued*

| Plate Number and Date | Number | Latitude | Diurnal Motion | | Longitudes on Days of Observation | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sidereal | Synodic | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2434 | 2704 | 4°.4 | 14°.43 | 13°.47 | 30°.9 | 46°.2 | ..... | ..... | ..... | ..... | ..... |
| Aug. 9, '07 | 2705 | 9.5 | 14.50 | 14.54 | 13.2 | 28.3 | ..... | ..... | ..... | ..... | ..... |
| $9^h08^m$ | 2706 | 12.6 | 14.41 | 13.45 | 11.9 | 26.9 | ..... | ..... | ..... | ..... | ..... |
| | 2707 | 18.2 | 14.68 | 13.72 | 3.8 | 19.1 | ..... | ..... | ..... | ..... | ..... |
| | 2708 | −15.6 | 14.41 | 13.45 | −17.4 | − 2.4 | ..... | ..... | ..... | ..... | ..... |
| | 2709 | −16.0 | 14.68 | 13.72 | −20.0 | − 4.7 | ..... | ..... | ..... | ..... | ..... |
| | 2710 | −13.3 | 14.14 | 13.18 | −27.3 | −12.6 | ..... | ..... | ..... | ..... | ..... |
| | 2711 | −14.4 | 14.77 | 13.81 | −32.5 | −17.1 | ..... | ..... | ..... | ..... | ..... |
| | 2712 | −11.8 | 14.43 | 13.47 | −40.7 | −25.3 | ..... | 0°.8 | 13°.7 | 26°.9 | ..... |
| | 2713 | −17.4 | 14.14 | 13.18 | −26.1 | −11.4 | ..... | ..... | ..... | ..... | ..... |
| | 2714 | − 8.5 | 14.32 | 13.36 | −34.8 | −19.9 | ..... | ..... | ..... | ..... | ..... |
| | 2715 | − 9.9 | 14.05 | 13.09 | −27.9 | −13.3 | ..... | ..... | ..... | ..... | ..... |
| | 2713′ | −11.7 | 14.59 | 13.63 | −36.4 | −21.2 | ..... | ..... | ..... | ..... | ..... |
| 2451 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Aug. 10, '07 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| $11^h54^m$ | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 2452 | 2716 | −12.8 | 14.61 | 13.64 | 18.0 | 31.9 | 45°.2 | ..... | ..... | ..... | ..... |
| Aug. 12, '07 | 2717 | − 9.1 | 14.52 | 13.55 | 3.9 | 17.1 | ..... | ..... | ..... | ..... | ..... |
| $10^h00^m$ | 2718 | −11.0 | 14.52 | 13.55 | − 5.2 | 7.9 | 21.8 | ..... | ..... | ..... | ..... |
| | 2719 | − 3.5 | 14.87 | 13.90 | − 8.0 | 5.0 | 19.7 | ..... | ..... | ..... | ..... |
| | 2720 | −13.9 | 15.02 | 14.05 | − 4.8 | 9.3 | 23.2 | ..... | ..... | ..... | ..... |
| | 2721 | −15.7 | 14.62 | 13.65 | 6.0 | 19.3 | ..... | ..... | ..... | ..... | ..... |
| | 2722 | −15.8 | 15.03 | 14.06 | 14.9 | 28.6 | ..... | ..... | ..... | ..... | ..... |
| | 2723 | −13.5 | 14.83 | 13.86 | 13.1 | 26.6 | ..... | ..... | ..... | ..... | ..... |
| | 2724 | −17.4 | 15.96 | 14.99 | 24.1 | 38.7 | ..... | ..... | ..... | ..... | ..... |
| | 2725 | − 5.6 | 14.82 | 13.85 | − 2.1 | 11.2 | 25.5 | ..... | ..... | ..... | ..... |
| | 2726 | − 3.4 | 14.17 | 13.20 | −15.0 | − 1.8 | 11.5 | ..... | 38.4 | ..... | ..... |
| | 2727 | 13.4 | 14.11 | 13.14 | −41.0 | −28.2 | ..... | ..... | ..... | ..... | ..... |
| 2457 | 2728 | 14.4 | 14.04 | 13.07 | −32.0 | −18.3 | ..... | 8.1 | ..... | ..... | ..... |
| Aug. 13, '07 | 2729 | 17.7 | 14.32 | 13.35 | −31.1 | −17.5 | ..... | ..... | ..... | ..... | ..... |
| $9^h23^m$ | 2730 | 15.3 | 14.25 | 13.28 | −35.0 | −21.1 | ..... | 5.4 | 19.8 | ..... | ..... |
| | 2731 | − 0.6 | 14.81 | 13.84 | −12.9 | 1.2 | ..... | ..... | ..... | ..... | ..... |
| | 2732 | − 6.7 | 14.15 | 13.18 | −11.9 | 1.3 | ..... | 27.9 | 42.3 | ..... | ..... |
| | 2733 | − 8.4 | 14.52 | 13.55 | −11.8 | 2.0 | ..... | ..... | ..... | ..... | ..... |
| | 2734 | − 8.6 | 14.48 | 13.51 | − 8.8 | 5.1 | ..... | 32.6 | ..... | ..... | ..... |
| | 2735 | − 2.1 | 13.89 | 12.92 | − 3.1 | 9.7 | ..... | 36.4 | ..... | ..... | ..... |
| | 2736 | −23.0 | 14.71 | 13.74 | − 1.8 | 12.2 | ..... | ..... | ..... | ..... | ..... |
| | 2737 | −12.6 | 13.53 | 12.56 | − 4.7 | 8.1 | ..... | ..... | ..... | ..... | ..... |
| | 2739 | − 7.1 | 13.93 | 12.96 | 3.9 | 17.1 | ..... | ..... | ..... | ..... | ..... |
| | 2740 | − 8.2 | 14.71 | 13.74 | 5.3 | 19.3 | ..... | ..... | ..... | ..... | ..... |
| | 2741 | −19.1 | 14.07 | 13.10 | −22.0 | − 8.3 | ..... | 18.2 | ..... | ..... | ..... |
| | 2742 | −22.3 | 14.03 | 13.06 | −25.5 | −12.2 | ..... | ..... | ..... | ..... | ..... |
| | 2743 | −20.6 | 14.28 | 13.31 | −20.7 | − 7.0 | ..... | 20.1 | ..... | ..... | ..... |
| | 2725′ | −10.2 | 14.42 | 13.45 | 9.7 | 23.4 | ..... | ..... | ..... | ..... | ..... |
| 2460 | 2744 | − 6.8 | 14.72 | 13.75 | 7.2 | ..... | 35.3 | ..... | ..... | ..... | ..... |
| Aug. 14, '07 | 2745 | −24.6 | 14.62 | 13.65 | − 8.2 | ..... | 20.0 | 33.8 | ..... | ..... | ..... |
| $9^h50^m$ | 2746 | −21.1 | 14.19 | 13.22 | −16.5 | ..... | 10.7 | 24.2 | ..... | ..... | ..... |
| | 2747 | 14.5 | 14.06 | 13.09 | −25.3 | ..... | 1.2 | 15.1 | ..... | ..... | ..... |
| 2465 | 2748 | −15.2 | 13.87 | 12.90 | 20.1 | 33.5 | ..... | ..... | ..... | ..... | ..... |
| Aug. 16, '07 | 2749 | 21.8 | 13.77 | 12.80 | − 9.2 | 4.1 | ..... | ..... | ..... | ..... | ..... |
| $10^h53^m$ | 2750 | 20.0 | 13.39 | 12.42 | − 9.1 | 3.8 | ..... | ..... | ..... | ..... | ..... |
| | 2751 | 19.8 | 13.58 | 12.61 | −12.0 | 1.1 | ..... | ..... | ..... | ..... | ..... |
| | 2752 | 15.8 | 14.25 | 13.28 | 3.7 | 17.5 | ..... | ..... | ..... | ..... | ..... |
| | 2753 | −19.0 | 14.06 | 13.09 | −35.5 | −21.9 | ..... | ..... | ..... | ..... | ..... |
| | 2754 | −21.0 | 13.87 | 12.90 | 14.9 | 28.3 | ..... | ..... | ..... | ..... | ..... |
| 2468 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Aug. 17, '07 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| $11^h49^m$ | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |

TABLE I—*Continued*

| Plate Number and Date | Number | Latitude | Diurnal Motion | | Longitudes on Days of Observation | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sidereal | Synodic | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2470 | 2755 | −16°.9 | 13°.40 | 12°.43 | 17°.8 | 30°.1 | 42°.1 | ..... | ..... | ..... | ..... |
| Aug. 22, '07 | 2756 | − 7.2 | 15.19 | 14.22 | 18.7 | 32.2 | 46.5 | ..... | ..... | ..... | ..... |
| $10^h11^m$ | 2757 | − 7.2 | 14.93 | 13.96 | 16.0 | 29.3 | 43.3 | ..... | ..... | ..... | ..... |
| | 2758 | −11.3 | 14.88 | 13.91 | 15.5 | 29.2 | 42.7 | ..... | ..... | ..... | ..... |
| | 2759 | −13.8 | 14.68 | 13.71 | 13.2 | 26.3 | 40.0 | ..... | ..... | ..... | ..... |
| | 2760 | −14.7 | 14.16 | 13.19 | 10.2 | 23.1 | 36.0 | ..... | ..... | ..... | ..... |
| | 2761 | −14.2 | 14.52 | 13.55 | 4.0 | 17.2 | 30.5 | ..... | ..... | ..... | ..... |
| | 2762 | −11.5 | 14.63 | 13.66 | 3.0 | 16.3 | ..... | ..... | ..... | ..... | ..... |
| | 2763 | −12.7 | 15.35 | 14.38 | − 1.5 | 12.5 | ..... | ..... | ..... | ..... | ..... |
| | 2764 | 4.1 | 14.68 | 13.71 | −13.0 | 0.0 | 13.8 | ..... | ..... | ..... | ..... |
| | 2765 | 10.5 | 14.47 | 13.50 | −10.1 | 3.0 | 16.3 | ..... | ..... | ..... | ..... |
| | 2766 | − 5.5 | 14.67 | 13.70 | 16.5 | 30.0 | 43.3 | ..... | ..... | ..... | ..... |
| | 2767 | 12.0 | 14.78 | 13.81 | −33.1 | −19.9 | − 6.1 | ..... | ..... | ..... | ..... |
| | 2768 | 7.4 | 14.62 | 13.65 | −34.8 | −21.7 | − 8.1 | ..... | ..... | ..... | ..... |
| | 2769 | 6.9 | 14.52 | 13.55 | −37.5 | −24.3 | −11.0 | ..... | ..... | ..... | ..... |
| | 2770 | 1.4 | 14.01 | 13.04 | −36.1 | −23.4 | −10.6 | ..... | ..... | ..... | ..... |
| | 2771 | − 8.0 | 14.94 | 13.97 | −34.4 | −20.8 | ..... | ..... | ..... | ..... | ..... |
| | 2772 | 13.0 | 14.83 | 13.86 | −40.2 | −27.0 | −13.1 | ..... | ..... | ..... | ..... |
| | 2773 | 10.9 | 14.78 | 13.81 | −36.2 | −23.2 | − 9.2 | ..... | ..... | ..... | ..... |
| | 2774 | 4.8 | 14.11 | 13.14 | −30.5 | −17.8 | − 4.8 | ..... | ..... | ..... | ..... |
| 2477 | 2775 | 1.1 | 15.23 | 14.26 | −14.4 | − 0.4 | ..... | ..... | ..... | ..... | ..... |
| Aug. 23, '07 | 2776 | 6.1 | 14.41 | 13.44 | −20.1 | − 6.9 | ..... | ..... | ..... | ..... | ..... |
| $9^h33^m$ | 2777 | − 8.1 | 14.11 | 13.14 | −18.9 | − 6.0 | ..... | ..... | ..... | ..... | ..... |
| | 2778 | −15.6 | 14.11 | 13.14 | −25.2 | −12.3 | ..... | ..... | ..... | ..... | ..... |
| | 2779 | −15.8 | 14.41 | 13.44 | −27.5 | −14.3 | ..... | ..... | ..... | ..... | ..... |
| | 2780 | −12.3 | 14.31 | 14.34 | −26.7 | −13.6 | ..... | ..... | ..... | ..... | ..... |
| | 2781 | −14.3 | 13.39 | 12.42 | −22.2 | −10.0 | ..... | ..... | ..... | ..... | ..... |
| | 2782 | −14.8 | 14.41 | 13.44 | 31.4 | 44.6 | ..... | ..... | ..... | ..... | ..... |
| | 2783 | 8.9 | 15.43 | 14.46 | −30.9 | −16.7 | ..... | ..... | ..... | ..... | ..... |
| | 2784 | 11.6 | 14.92 | 13.95 | −25.0 | −11.3 | ..... | ..... | ..... | ..... | ..... |
| 2480 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Aug. 24, '07 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| $9^h07^m$ | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 2501 | 2785 | −10.4 | 14.10 | 13.12 | 16.4 | 29.4 | ..... | ..... | ..... | ..... | ..... |
| Sept. 12, '07 | 2786 | −10.2 | 14.83 | 13.85 | 12.1 | 25.4 | 39.2 | ..... | ..... | ..... | ..... |
| $10^h48^m$ | 2787 | −12.6 | 14.21 | 13.23 | 8.4 | 21.0 | 34.3 | ..... | ..... | ..... | ..... |
| | 2788 | −20.8 | 14.98 | 14.00 | 6.5 | 20.1 | 33.9 | ..... | ..... | ..... | ..... |
| | 2789 | − 7.0 | 13.59 | 12.61 | 31.2 | 43.7 | ..... | ..... | ..... | ..... | ..... |
| | 2790 | −10.0 | 14.00 | 13.02 | 32.0 | 44.9 | ..... | ..... | ..... | ..... | ..... |
| | 2791 | 17.9 | 14.40 | 13.42 | 15.0 | 28.3 | ..... | ..... | ..... | ..... | ..... |
| | 2792 | 15.7 | 14.30 | 13.32 | 14.5 | 27.7 | ..... | ..... | ..... | ..... | ..... |
| | 2793 | 14.2 | 14.26 | 13.28 | 10.0 | 22.7 | 36.0 | ..... | ..... | ..... | ..... |
| | 2794 | 11.7 | 15.11 | 14.13 | 10.9 | 24.9 | ..... | ..... | ..... | ..... | ..... |
| | 2795 | 11.3 | 14.52 | 13.54 | 8.8 | 21.9 | 35.3 | ..... | ..... | ..... | ..... |
| | 2796 | 16.0 | 14.27 | 13.29 | 8.0 | 21.0 | 34.0 | ..... | ..... | ..... | ..... |
| | 2797 | 17.7 | 15.41 | 14.43 | 0.5 | 14.8 | ..... | ..... | ..... | ..... | ..... |
| | 2798 | 17.9 | 14.88 | 13.90 | − 1.2 | 12.2 | 26.0 | ..... | ..... | ..... | ..... |
| | 2799 | 9.0 | 14.10 | 13.12 | −14.9 | − 1.9 | ..... | ..... | ..... | ..... | ..... |
| | 2800 | 7.8 | 14.30 | 13.32 | −18.2 | − 5.0 | ..... | ..... | ..... | ..... | ..... |
| | 2801 | 10.0 | 14.47 | 13.49 | −19.4 | − 6.1 | 7.0 | ..... | ..... | ..... | ..... |
| | 2802 | 8.0 | 14.40 | 13.42 | −22.2 | − 8.9 | ..... | ..... | ..... | ..... | ..... |
| | 2803 | 12.6 | 14.50 | 13.52 | −22.2 | − 8.8 | ..... | ..... | ..... | ..... | ..... |
| | 2804 | 10.0 | 14.62 | 13.64 | −21.9 | − 8.8 | 4.8 | ..... | ..... | ..... | ..... |
| | 2805 | −12.8 | 14.88 | 13.90 | −10.0 | 3.7 | 17.2 | ..... | ..... | ..... | ..... |
| | 2806 | 10.0 | 14.88 | 13.90 | − 9.7 | 3.8 | 17.5 | ..... | ..... | ..... | ..... |
| | 2807 | − 1.9 | 15.03 | 14.05 | 9.9 | 23.7 | 37.4 | ..... | ..... | ..... | ..... |
| | 2808 | − 4.9 | 14.52 | 13.54 | 17.0 | 30.8 | 43.5 | ..... | ..... | ..... | ..... |
| 2505 | 2809 | 10.6 | 14.96 | 13.98 | 1.3 | 14.8 | ..... | ..... | ..... | ..... | ..... |
| Sept. 13, '07 | 2810 | − 0.8 | 15.06 | 14.08 | 20.4 | 34.0 | ..... | ..... | ..... | ..... | ..... |
| $10^h35^m$ | 2811 | − 0.5 | 14.85 | 13.87 | 16.0 | 29.4 | ..... | ..... | ..... | ..... | ..... |
| | 2812 | − 2.3 | 14.02 | 13.04 | 14.2 | 26.8 | ..... | ..... | ..... | ..... | ..... |
| | 2813 | − 4.2 | 14.23 | 13.25 | 13.3 | 26.1 | ..... | ..... | ..... | ..... | ..... |
| | 2814 | − 7.0 | 14.33 | 13.35 | 8.3 | 21.2 | ..... | ..... | ..... | ..... | ..... |
| | 2815 | − 9.1 | 15.27 | 14.29 | 23.7 | 37.5 | ..... | ..... | ..... | ..... | ..... |

TABLE I—*Continued*

| Plate Number and Date | Number | Latitude | Diurnal Motion | | Longitudes on Days of Observation | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sidereal | Synodic | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2505 (*cont.*) | 2816 | −21°7 | 14°33 | 13°35 | −29°9 | −17°0 | ..... | ..... | ..... | ..... | ..... |
| | 2817 | −21.3 | 14.23 | 13.25 | −25.8 | −13.0 | ..... | ..... | ..... | ..... | ..... |
| | 2818 | −17.4 | 14.13 | 13.15 | −24.2 | −11.5 | ..... | ..... | ..... | ..... | ..... |
| 2509 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Sept. 14, '07 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| $9^h46^m$ | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 2538*a* | 2819 | 13.6 | 14.12 | 13.13 | 22.7 | 36.3 | ..... | ..... | ..... | ..... | ..... |
| Oct. 8, '07 | 2820 | 14.9 | 14.41 | 13.42 | 24.3 | 38.2 | ..... | ..... | ..... | ..... | ..... |
| $9^h32^m$ | 2821 | 15.4 | 14.51 | 13.52 | − 6.8 | 7.2 | ..... | ..... | ..... | ..... | ..... |
| | 2822 | 21.1 | 13.64 | 12.65 | − 7.1 | 6.0 | ..... | ..... | ..... | ..... | ..... |
| | 2823 | 3.8 | 15.09 | 14.10 | − 7.6 | 7.0 | ..... | ..... | ..... | ..... | ..... |
| | 2824 | − 1.3 | 14.90 | 13.91 | − 7.5 | 6.9 | ..... | ..... | ..... | ..... | ..... |
| | 2825 | − 5.3 | 13.55 | 12.56 | − 7.5 | 5.5 | ..... | ..... | ..... | ..... | ..... |
| | 2826 | − 8.1 | 14.22 | 13.23 | − 4.2 | 9.5 | ..... | ..... | ..... | ..... | ..... |
| | 2827 | − 5.9 | 14.61 | 13.62 | − 4.6 | 9.5 | ..... | ..... | ..... | ..... | ..... |
| | 2828 | − 4.0 | 14.02 | 13.03 | 1.2 | 14.7 | ..... | ..... | ..... | ..... | ..... |
| | 2829 | − 7.9 | 14.51 | 13.52 | 0.2 | 14.2 | ..... | ..... | ..... | ..... | ..... |
| | 2830 | −12.7 | 13.74 | 12.75 | 3.8 | 17.0 | ..... | ..... | ..... | ..... | ..... |
| | 2831 | −12.2 | 14.32 | 13.33 | 20.6 | 34.4 | ..... | ..... | ..... | ..... | ..... |
| | 2832 | −15.4 | 14.32 | 13.33 | 21.5 | 35.3 | ..... | ..... | ..... | ..... | ..... |
| | 2833 | − 0.1 | 15.28 | 14.29 | 27.0 | 41.8 | ..... | ..... | ..... | ..... | ..... |
| | 2834 | − 1.5 | 14.90 | 13.91 | 23.4 | 37.8 | ..... | ..... | ..... | ..... | ..... |
| 2542 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Oct. 9,' 07 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| $10^h23^m$ | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 2551 | 2835 | 11.9 | 14.42 | 13.43 | 12.9 | 25.8 | ..... | ..... | ..... | ..... | ..... |
| Oct. 17, '07 | 2836 | 12.1 | 14.01 | 13.02 | 21.4 | 33.9 | ..... | ..... | ..... | ..... | ..... |
| $11^h05^m$ | 2837 | 15.7 | 14.84 | 13.85 | 29.7 | 43.0 | ..... | ..... | ..... | ..... | ..... |
| | 2838 | 16.5 | 14.11 | 13.12 | 25.5 | 38.1 | ..... | ..... | ..... | ..... | ..... |
| | 2839 | 23.8 | 13.69 | 12.70 | 23.8 | 36.0 | ..... | ..... | ..... | ..... | ..... |
| | 2840 | − 4.7 | 14.63 | 13.64 | 24.2 | 37.3 | ..... | ..... | ..... | ..... | ..... |
| | 2841 | − 0.2 | 14.53 | 13.54 | 27.7 | 40.7 | ..... | ..... | ..... | ..... | ..... |
| | 2842 | − 0.9 | 15.05 | 14.06 | 24.3 | 37.8 | ..... | ..... | ..... | ..... | ..... |
| | 2843 | − 6.6 | 13.69 | 12.70 | − 6.2 | 6.0 | ..... | ..... | ..... | ..... | ..... |
| | 2844 | 10.8 | 14.63 | 13.64 | −18.1 | − 5.0 | ..... | ..... | ..... | ..... | ..... |
| | 2845 | 12.2 | 14.42 | 13.43 | −20.1 | − 7.2 | ..... | ..... | ..... | ..... | ..... |
| | 2846 | 7.8 | 14.21 | 13.22 | −21.7 | − 9.0 | ..... | ..... | ..... | ..... | ..... |
| | 2847 | 6.0 | 14.63 | 13.64 | −19.7 | − 6.6 | ..... | ..... | ..... | ..... | ..... |
| | 2848 | 10.3 | 15.15 | 14.16 | −25.8 | −12.2 | ..... | ..... | ..... | ..... | ..... |
| | 2849 | 1.2 | 14.42 | 13.43 | −24.0 | −11.1 | ..... | ..... | ..... | ..... | ..... |
| | 2850 | 1.4 | 14.73 | 13.74 | −28.2 | −15.0 | ..... | ..... | ..... | ..... | ..... |
| | 2851 | 11.6 | 14.42 | 13.43 | −30.9 | −18.0 | ..... | ..... | ..... | ..... | ..... |
| 2554 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Oct. 18, '07 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| $10^h08^m$ | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 2557 | 2851′ | 2.1 | 15.51 | 14.51 | 25.5 | 40.0 | ..... | ..... | ..... | ..... | ..... |
| Oct. 21, '07 | 2852 | 3.8 | 15.01 | 14.01 | 24.5 | 38.5 | ..... | ..... | ..... | ..... | ..... |
| $10^h33^m2$ | 2853 | 5.6 | 14.71 | 13.71 | 21.9 | 35.6 | ..... | ..... | ..... | ..... | ..... |
| | 2854 | 0.8 | 14.67 | 13.67 | 17.4 | 31.2 | 45°0 | ..... | ..... | ..... | ..... |
| | 2855 | 8.0 | 14.71 | 13.71 | 25.4 | 39.1 | ..... | ..... | ..... | ..... | ..... |
| | 2856 | 10.3 | 15.21 | 14.21 | 25.3 | 39.5 | ..... | ..... | ..... | ..... | ..... |
| | 2857 | 6.6 | 14.92 | 13.92 | 18.1 | 32.9 | 46.2 | ..... | ..... | ..... | ..... |
| | 2858 | 11.5 | 14.33 | 13.33 | 21.8 | 34.8 | 48.7 | ..... | ..... | ..... | ..... |
| | 2859 | 13.3 | 14.77 | 13.77 | 14.2 | 28.0 | 42.0 | ..... | ..... | ..... | ..... |
| | 2860 | 11.9 | 13.78 | 12.78 | 4.7 | 17.7 | 30.5 | ..... | ..... | ..... | ..... |
| | 2861 | 4.9 | 14.71 | 13.71 | 5.2 | 18.9 | ..... | ..... | ..... | ..... | ..... |
| | 2862 | 0.4 | 13.93 | 12.93 | 6.6 | 19.9 | 32.7 | ..... | ..... | ..... | ..... |
| | 2863 | 9.1 | 14.57 | 13.57 | 5.3 | 19.1 | 32.7 | ..... | ..... | ..... | ..... |

TABLE I—*Continued*

| Plate Number and Date | Number | Latitude | Diurnal Motion | | Longitudes on Days of Observation | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sidereal | Synodic | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2557 (*cont.*) | 2864 | 5°5 | 14°52 | 13°52 | 2°1 | 16°0 | 29°4 | ..... | ..... | ..... | ..... |
| | 2865 | 9.7 | 14.52 | 13.52 | 2.4 | 16.0 | 29.7 | ..... | ..... | ..... | ..... |
| | 2866 | 13.3 | 14.33 | 13.33 | − 3.1 | 10.4 | 23.8 | ..... | ..... | ..... | ..... |
| | 2867 | 6.7 | 13.88 | 12.88 | −10.6 | 2.2 | 15.4 | ..... | ..... | ..... | ..... |
| | 2868 | 3.4 | 14.71 | 13.71 | − 8.7 | 5.0 | ..... | ..... | ..... | ..... | ..... |
| | 2869 | − 3.6 | 14.13 | 13.13 | − 6.3 | 7.5 | 20.2 | ..... | ..... | ..... | ..... |
| | 2870 | 10.9 | 14.28 | 13.28 | −16.0 | − 2.7 | 10.8 | ..... | ..... | ..... | ..... |
| | 2871 | 13.0 | 14.61 | 13.61 | −14.1 | − 0.5 | ..... | ..... | ..... | ..... | ..... |
| | 2872 | 18.1 | 12.81 | 11.81 | −23.3 | −11.5 | ..... | ..... | ..... | ..... | ..... |
| | 2873 | 7.4 | 14.41 | 13.41 | − 7.2 | 6.2 | ..... | ..... | ..... | ..... | ..... |
| | 2874 | 14.0 | 14.71 | 13.71 | 0.2 | 13.9 | ..... | ..... | ..... | ..... | ..... |
| | 2875 | 12.2 | 14.71 | 13.71 | 1.0 | 14.7 | ..... | ..... | ..... | ..... | ..... |
| | 2876 | 4.3 | 14.62 | 13.62 | 16.9 | 30.7 | 44.4 | ..... | ..... | ..... | ..... |
| | 2877 | −22.5 | 14.47 | 13.47 | 14.8 | 38.5 | 42.0 | ..... | ..... | ..... | ..... |
| | 2878 | −19.9 | 14.51 | 13.51 | 14.5 | 28.0 | ..... | ..... | ..... | ..... | ..... |
| | 2879 | −26.4 | 14.31 | 13.31 | 3.7 | 17.0 | ..... | ..... | ..... | ..... | ..... |
| | 2880 | −28.8 | 15.21 | 14.21 | 5.8 | 20.0 | ..... | ..... | ..... | ..... | ..... |
| | 2881 | −23.3 | 14.37 | 13.37 | 6.5 | 20.3 | 33.5 | ..... | ..... | ..... | ..... |
| | 2882 | −16.9 | 15.21 | 14.21 | − 8.5 | 5.7 | ..... | ..... | ..... | ..... | ..... |
| | 2883 | −16.4 | 14.21 | 13.21 | −12.5 | 0.7 | ..... | ..... | ..... | ..... | ..... |
| | 2884 | −18.3 | 15.01 | 14.01 | −19.8 | − 5.8 | ..... | ..... | ..... | ..... | ..... |
| | 2885 | −22.7 | 13.91 | 12.91 | −10.3 | 2.6 | ..... | ..... | ..... | ..... | ..... |
| | 2886 | −24.0 | 14.81 | 13.81 | − 7.9 | 5.9 | ..... | ..... | ..... | ..... | ..... |
| | 2887 | −29.7 | 14.51 | 13.51 | −13.0 | 0.5 | ..... | ..... | ..... | ..... | ..... |
| | 2888 | − 9.9 | 14.92 | 13.92 | −36.1 | −21.9 | − 8.0 | ..... | ..... | ..... | ..... |
| | 2889 | − 5.2 | 14.11 | 13.11 | −35.1 | −22.0 | ..... | ..... | ..... | ..... | ..... |
| | 2890 | 1.2 | 13.71 | 12.71 | −27.9 | −15.2 | ..... | ..... | ..... | ..... | ..... |
| | 2891 | 6.7 | 14.51 | 13.51 | 13.0 | 26.5 | ..... | ..... | ..... | ..... | ..... |
| | 2892 | 7.0 | 14.62 | 13.62 | 3.5 | 17.3 | 31.0 | ..... | ..... | ..... | ..... |
| 2560 | 2893 | 4.3 | 14.93 | 13.93 | 24.1 | 38.3 | ..... | ..... | ..... | ..... | ..... |
| Oct. 22, '07 | 2894 | 12.0 | 14.63 | 13.63 | 23.9 | 37.8 | ..... | ..... | ..... | ..... | ..... |
| $10^h32^m$ | 2895 | 12.1 | 13.75 | 12.75 | 21.2 | 34.2 | ..... | ..... | ..... | ..... | ..... |
| | 2896 | 11.9 | 14.54 | 13.54 | 9.9 | 23.7 | ..... | ..... | ..... | ..... | ..... |
| | 2897 | 15.6 | 14.14 | 13.14 | 1.2 | 14.6 | ..... | ..... | ..... | ..... | ..... |
| | 2898 | − 8.9 | 14.93 | 13.93 | −27.2 | −13.0 | ..... | ..... | ..... | ..... | ..... |
| | 2899 | 10.8 | 14.47 | 13.47 | −37.1 | −23.0 | ..... | 3°0 | ..... | ..... | ..... |
| | 2900 | 4.8 | 13.85 | 12.85 | −13.8 | − 0.7 | ..... | ..... | ..... | ..... | ..... |
| | 2901 | 5.7 | 14.63 | 13.63 | −16.2 | − 2.3 | ..... | ..... | ..... | ..... | ..... |
| | 2902 | 11.4 | 13.95 | 12.95 | −11.0 | 2.2 | ..... | ..... | ..... | ..... | ..... |
| 2564 | 2903 | −10.0 | 14.37 | 13.37 | −11.0 | ..... | 15.1 | ..... | ..... | ..... | ..... |
| Oct. 23, '07 | 2904 | −10.6 | 14.58 | 13.58 | − 8.9 | ..... | 17.6 | ..... | ..... | ..... | ..... |
| $11^h00^m$ | 2905 | −19.5 | 14.06 | 13.06 | −30.3 | ..... | − 4.8 | ..... | ..... | ..... | ..... |
| | 2906 | 7.9 | 14.01 | 13.01 | −22.7 | ..... | 2.7 | ..... | ..... | ..... | ..... |
| | 2907 | 5.2 | 14.58 | 13.58 | −29.0 | ..... | − 2.5 | ..... | ..... | ..... | ..... |
| | 2908 | 8.2 | 14.27 | 13.27 | −27.2 | ..... | − 1.3 | ..... | ..... | ..... | ..... |
| | 2909 | 2.6 | 14.01 | 13.01 | −32.2 | ..... | − 6.8 | ..... | ..... | ..... | ..... |
| | 2910 | 7.0 | 14.42 | 13.42 | −25.8 | ..... | 0.4 | ..... | ..... | ..... | ..... |
| 2568 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Oct. 25, '07 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| $9^h51^m$ | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 2615 | 2911 | −18.2 | 14.88 | 13.87 | 33.8 | 47.8 | ..... | ..... | ..... | ..... | ..... |
| Dec. 19, '07 | 2912 | −15.4 | 14.49 | 13.48 | 34.8 | 48.4 | ..... | ..... | ..... | ..... | ..... |
| $11^h23^m$ | 2913 | −19.5 | 15.68 | 14.67 | 11.7 | 26.5 | ..... | ..... | ..... | ..... | ..... |
| | 2914 | −17.1 | 15.48 | 14.47 | 12.3 | 26.9 | ..... | ..... | ..... | ..... | ..... |
| | 2915 | −12.1 | 14.59 | 13.58 | 37.5 | 51.2 | ..... | ..... | ..... | ..... | ..... |
| | 2917 | − 8.2 | 14.19 | 13.18 | −25.3 | −12.0 | ..... | ..... | ..... | ..... | ..... |
| | 2918 | − 9.4 | 14.59 | 13.58 | −28.0 | −14.3 | ..... | ..... | ..... | ..... | ..... |
| | 2919 | − 8.5 | 14.29 | 13.28 | −30.2 | −16.8 | ..... | ..... | ..... | ..... | ..... |
| | 2920 | 0.7 | 14.98 | 13.97 | −28.6 | −14.5 | ..... | ..... | ..... | ..... | ..... |
| | 2921 | − 6.8 | 14.09 | 13.08 | −20.2 | − 7.0 | ..... | ..... | ..... | ..... | ..... |
| | 2922 | − 6.2 | 14.39 | 13.38 | −28.9 | −15.4 | ..... | ..... | ..... | ..... | ..... |
| | 2923 | − 5.7 | 14.39 | 13.38 | −36.2 | −22.7 | ..... | ..... | ..... | ..... | ..... |
| | 2924 | − 1.9 | 14.59 | 13.58 | −29.3 | −15.6 | ..... | ..... | ..... | ..... | ..... |
| | 2925 | 17.0 | 15.08 | 14.07 | − 3.6 | 10.6 | ..... | ..... | ..... | ..... | ..... |
| | 2926 | 0.1 | 15.58 | 14.57 | −17.8 | − 3.1 | ..... | ..... | ..... | ..... | ..... |

TABLE I—*Continued*

| Plate Number and Date | Number | Latitude | Diurnal Motion | | Lonoitudes on Days of Observation | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sidereal | Synodic | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2620 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Dec. 20, '07 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 11h36m | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 2682 | 2927 | − 6°6 | 14°80 | 13°83 | 24°2 | 38°0 | ..... | ..... | ..... | ..... | ..... |
| Apr. 20, '08 | 2928 | − 7.4 | 14.60 | 13.63 | 33.4 | 47.0 | ..... | ..... | ..... | ..... | ..... |
| 10h13m | 2929 | − 9.2 | 14.40 | 13.43 | 34.6 | 48.0 | ..... | ..... | ..... | ..... | ..... |
| | 2930 | −17.3 | 14.09 | 13.12 | 15.0 | 28.5 | 43°8 | ..... | ..... | ..... | ..... |
| | 2931 | −18.9 | 14.33 | 13.36 | 18.8 | 32.1 | 48.1 | ..... | ..... | ..... | ..... |
| | 2932 | −16.2 | 14.50 | 13.53 | 18.0 | 31.5 | ..... | ..... | ..... | ..... | ..... |
| | 2933 | −21.9 | 14.04 | 13.07 | 18.3 | 31.9 | 47.0 | ..... | ..... | ..... | ..... |
| | 2934 | −10.8 | 14.75 | 13.78 | −19.9 | − 6.5 | 10.3 | ..... | ..... | ..... | ..... |
| | 2935 | −10.9 | 14.50 | 13.53 | −22.0 | − 8.5 | ..... | ..... | ..... | ..... | ..... |
| | 2936 | −13.4 | 13.00 | 12.03 | −26.9 | −14.9 | ..... | ..... | ..... | ..... | ..... |
| | 2937 | −27.9 | 14.00 | 13.03 | −18.8 | − 5.8 | ..... | ..... | ..... | ..... | ..... |
| | 2938 | −10.7 | 14.60 | 13.63 | −33.9 | −20.3 | ..... | ..... | ..... | ..... | ..... |
| | 2939 | −19.2 | 14.20 | 13.23 | 11.9 | 25.1 | ..... | ..... | ..... | ..... | ..... |
| 2685 | 2942 | −19.1 | 13.93 | 12.96 | 30.2 | 45.7 | ..... | ..... | ..... | ..... | ..... |
| Apr. 21, '08 | 2943 | −15.3 | 14.02 | 13.05 | −18.1 | − 2.5 | ..... | ..... | ..... | ..... | ..... |
| 10h10m | 2944 | −12.3 | 14.85 | 13.88 | −19.4 | − 2.8 | ..... | ..... | ..... | ..... | ..... |
| | 2945 | −12.2 | 14.60 | 13.63 | − 6.8 | 9.5 | ..... | ..... | ..... | ..... | ..... |
| | 2946 | − 5.7 | 14.43 | 13.46 | −31.0 | −14.9 | ..... | ..... | ..... | ..... | ..... |
| | 2947 | − 0.4 | 14.52 | 13.55 | −30.5 | −14.3 | ..... | ..... | ..... | ..... | ..... |
| | 2948 | 2.5 | 14.18 | 13.21 | −24.1 | − 8.3 | ..... | ..... | ..... | ..... | ..... |
| | 2949 | 2.3 | 14.43 | 13.46 | −30.8 | −14.7 | ..... | ..... | ..... | ..... | ..... |
| | 2950 | 10.5 | 14.18 | 13.21 | −35.4 | −19.6 | ..... | ..... | ..... | ..... | ..... |
| | 2951 | − 4.0 | 14.35 | 13.38 | −29.0 | −13.0 | ..... | ..... | ..... | ..... | ..... |
| 2689 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Apr. 22, '08 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 2h52m | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 2702 | 2953 | 9.0 | 13.45 | 12.49 | 20.6 | 33.3 | ..... | ..... | ..... | ..... | ..... |
| May 20, '08 | 2954 | 12.9 | 13.99 | 13.03 | 14.1 | 27.4 | 40.5 | ..... | ..... | ..... | ..... |
| 10h04m | 2955 | 15.9 | 14.93 | 13.97 | 12.1 | 26.3 | ..... | ..... | ..... | ..... | ..... |
| | 2956 | 15.5 | 14.73 | 13.77 | 10.0 | 24.0 | ..... | ..... | ..... | ..... | ..... |
| | 2957 | 6.4 | 14.98 | 14.02 | 17.3 | 31.9 | 45.7 | ..... | ..... | ..... | ..... |
| | 2958 | −14.1 | 13.55 | 12.59 | 24.2 | 37.0 | ..... | ..... | ..... | ..... | ..... |
| | 2959 | 12.2 | 14.24 | 13.28 | −16.6 | − 2.9 | 10.3 | ..... | ..... | ..... | ..... |
| | 2960 | 9.7 | 14.37 | 13.41 | −17.9 | − 4.3 | 9.5 | ..... | ..... | ..... | ..... |
| | 2961 | 7.7 | 14.88 | 13.92 | −17.9 | − 3.8 | 10.3 | ..... | ..... | ..... | ..... |
| | 2962 | −10.3 | 13.94 | 12.98 | −14.3 | − 1.0 | 12.0 | ..... | ..... | ..... | ..... |
| | 2963 | − 7.0 | 14.44 | 13.48 | −24.0 | −10.3 | ..... | ..... | ..... | ..... | ..... |
| | 2964 | − 7.9 | 13.84 | 12.88 | −22.3 | − 8.9 | 3.8 | ..... | ..... | ..... | ..... |
| | 2966 | −12.8 | 14.33 | 13.37 | −29.4 | −15.7 | − 2.3 | ..... | ..... | ..... | ..... |
| | 2967 | − 9.1 | 14.04 | 13.08 | −33.0 | −20.0 | − 6.5 | ..... | ..... | ..... | ..... |
| | 2968 | 6.3 | 14.14 | 13.18 | −38.5 | −25.1 | ..... | ..... | ..... | ..... | ..... |
| | 2969 | 8.7 | 14.44 | 13.48 | −41.5 | −27.8 | ..... | ..... | ..... | ..... | ..... |
| | 2970 | − 4.6 | 15.03 | 14.07 | −11.7 | 2.6 | ..... | ..... | ..... | ..... | ..... |
| | 2971 | − 3.1 | 15.12 | 14.16 | − 4.7 | 9.9 | 24.0 | ..... | ..... | ..... | ..... |
| | 2972 | 1.5 | 15.03 | 14.07 | − 0.9 | 13.4 | ..... | ..... | ..... | ..... | ..... |
| | 2973 | 11.9 | 14.81 | 13.85 | − 4.1 | 10.3 | 24.2 | ..... | ..... | ..... | ..... |
| | 2974 | −15.9 | 14.73 | 13.77 | − 3.9 | 10.4 | 24.0 | ..... | ..... | ..... | ..... |
| 2705 | 2975 | −15.0 | 14.13 | 13.17 | 12.0 | 25.3 | ..... | ..... | ..... | ..... | ..... |
| May 21,' 08 | 2976 | −12.8 | 15.22 | 14.26 | 14.5 | 28.9 | ..... | ..... | ..... | ..... | ..... |
| 10h28m | 2977 | 9.6 | 14.53 | 13.57 | 26.3 | 40.0 | ..... | ..... | ..... | ..... | ..... |
| | 2978 | 10.4 | 14.23 | 13.27 | 30.3 | 43.7 | ..... | ..... | ..... | ..... | ..... |
| | 2979 | 6.0 | 13.74 | 12.78 | 24.0 | 36.9 | ..... | ..... | ..... | ..... | ..... |
| | 2980 | 8.4 | 13.93 | 12.97 | 23.8 | 36.9 | ..... | ..... | ..... | ..... | ..... |
| | 2981 | −12.8 | 14.13 | 13.17 | −14.1 | − 0.8 | ..... | ..... | ..... | ..... | ..... |
| | 2981′ | −16.5 | 14.13 | 13.17 | 20.4 | 33.7 | ..... | ..... | ..... | ..... | ..... |
| 2709 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| May 22, '08. | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 10h42m | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |

TABLE I—*Continued*

| Plate Number and Date | Number | Latitude | Diurnal Motion | | Longitudes on Days of Observation | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sidereal | Synodic | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2714 | 2982 | 8°.6 | 14°.51 | 13°.56 | 12°.0 | 25°.8 | ..... | ..... | ..... | ..... | ..... |
| June 1, '08 | 2983 | 7.5 | 14.80 | 13.85 | 8.9 | 23.0 | ..... | ..... | ..... | ..... | ..... |
| 9h18m | 2984 | 7.3 | 13.92 | 12.97 | 5.1 | 18.3 | ..... | ..... | ..... | ..... | ..... |
| | 2985 | − 8.1 | 14.31 | 13.36 | 27.2 | 40.8 | ..... | ..... | ..... | ..... | ..... |
| | 2986 | −12.0 | 15.09 | 14.14 | 24.3 | 38.7 | ..... | ..... | ..... | ..... | ..... |
| | 2987 | −15.3 | 14.60 | 13.65 | 22.8 | 36.7 | ..... | ..... | ..... | ..... | ..... |
| | 2988 | −15.4 | 14.80 | 13.85 | 16.0 | 30.1 | ..... | ..... | ..... | ..... | ..... |
| | 2989 | −11.2 | 14.21 | 13.26 | 12.9 | 26.4 | ..... | ..... | ..... | ..... | ..... |
| | 2990 | − 8.5 | 14.11 | 13.16 | 14.9 | 28.3 | ..... | ..... | ..... | ..... | ..... |
| | 2991 | − 5.7 | 14.60 | 13.65 | 18.9 | 32.8 | ..... | ..... | ..... | ..... | ..... |
| | 2992 | − 4.2 | 15.39 | 14.44 | 12.9 | 27.6 | ..... | ..... | ..... | ..... | ..... |
| | 2993 | − 6.8 | 15.00 | 14.05 | 9.8 | 24.1 | ..... | ..... | ..... | ..... | ..... |
| | 2994 | − 8.2 | 15.09 | 14.14 | 7.8 | 22.2 | ..... | ..... | ..... | ..... | ..... |
| | 2995 | −13.9 | 14.37 | 13.42 | 8.1 | 21.9 | ..... | 48°.5 | ..... | ..... | ..... |
| | 2996 | −17.3 | 14.08 | 13.13 | 4.0 | 18.0 | ..... | 43.6 | ..... | ..... | ..... |
| | 2997 | −23.9 | 14.41 | 13.46 | 7.3 | 21.0 | ..... | ..... | ..... | ..... | ..... |
| | 2998 | −18.6 | 13.62 | 12.67 | − 0.9 | 12.0 | ..... | ..... | ..... | ..... | ..... |
| | 2999 | 7.5 | 14.70 | 13.75 | − 8.7 | 5.3 | ..... | ..... | ..... | ..... | ..... |
| | 3000 | − 6.5 | 14.36 | 13.41 | −10.3 | 3.2 | ..... | 30.0 | ..... | ..... | ..... |
| | 3001 | − 4.6 | 14.41 | 13.46 | −12.1 | 1.6 | ..... | ..... | ..... | ..... | ..... |
| | 3002 | − 0.1 | 14.91 | 13.96 | −13.7 | 0.6 | ..... | 28.3 | ..... | ..... | ..... |
| | 3003 | 1.3 | 14.11 | 13.16 | −15.1 | − 1.7 | ..... | ..... | ..... | ..... | ..... |
| | 3004 | − 4.1 | 14.61 | 13.66 | −16.9 | − 1.9 | ..... | 24.8 | 38°.4 | ..... | ..... |
| | 3005 | − 5.7 | 14.80 | 13.85 | −16.8 | − 2.7 | ..... | ..... | ..... | ..... | ..... |
| | 3006 | − 7.4 | 14.80 | 13.85 | −18.6 | − 4.5 | ..... | ..... | ..... | ..... | ..... |
| | 3007 | − 5.2 | 14.71 | 13.76 | −19.8 | − 5.4 | ..... | 21.3 | 36.0 | ..... | ..... |
| | 3008 | − 1.6 | 14.60 | 13.65 | −20.0 | − 6.1 | ..... | ..... | ..... | ..... | ..... |
| | 3009 | − 3.8 | 14.94 | 13.99 | −26.7 | −12.7 | ..... | 14.7 | 29.7 | 43°.7 | ..... |
| | 3010 | −10.0 | 14.23 | 13.28 | −24.0 | −10.2 | ..... | 16.0 | ..... | ..... | ..... |
| 2719 | 3011 | 7.6 | 14.46 | 13.51 | 3.8 | ..... | 29°.9 | 44.7 | ..... | ..... | ..... |
| June 2, '08 | | | | | | | | | | | |
| 9h44m | | | | | | | | | | | |
| 2725 | 3012 | 8.7 | 15.21 | 14.26 | − 5.7 | 8.9 | ..... | ..... | ..... | ..... | ..... |
| June 4, '08 | 3013 | −5.9 | 14.14 | 13.19 | 27.0 | 40.5 | ..... | ..... | ..... | ..... | ..... |
| 9h29m | 3014 | 10.2 | 13.85 | 12.90 | 27.8 | 41.0 | ..... | ..... | ..... | ..... | ..... |
| | 3015 | 9.9 | 14.63 | 13.68 | −11.2 | 2.8 | ..... | ..... | ..... | ..... | ..... |
| | 3016 | 10.7 | 14.80 | 13.85 | −15.2 | − 1.1 | 12.9 | ..... | ..... | ..... | ..... |
| | 3017 | − 8.2 | 14.65 | 13.70 | −10.0 | 4.0 | 17.8 | ..... | ..... | ..... | ..... |
| | 3018 | −14.9 | 13.77 | 12.82 | −15.9 | − 2.8 | 10.1 | ..... | ..... | ..... | ..... |
| | 3020 | − 9.9 | 14.16 | 13.21 | −23.3 | − 9.5 | 3.5 | ..... | ..... | ..... | ..... |
| | 3021 | − 8.0 | 14.51 | 13.56 | −21.2 | − 7.9 | 6.3 | ..... | ..... | ..... | ..... |
| | 3022 | − 7 1 | 14.85 | 13.90 | −17.0 | − 3.1 | 11.2 | ..... | ..... | ..... | ..... |
| | 3023 | 10.1 | 14.92 | 13.97 | −34.6 | −20.3 | ..... | ..... | ..... | ..... | ..... |
| | 3024 | −12.6 | 14.56 | 13.61 | −43.1 | −29.1 | −15.5 | ..... | ..... | ..... | ..... |
| 2730 | 3025 | − 9.9 | 14.58 | 13.63 | 29.2 | 42.9 | ..... | ..... | ..... | ..... | ..... |
| June 5, '08 | 3026 | −13.1 | 13.59 | 12.64 | 18.4 | 31.1 | ..... | ..... | ..... | ..... | ..... |
| 10h03m | 3027 | 11.4 | 14.98 | 14.03 | 5.4 | 19.5 | ..... | ..... | ..... | ..... | ..... |
| | 3028 | 9.8 | 15.08 | 14.13 | 1.3 | 15.5 | ..... | ..... | ..... | ..... | ..... |
| | 3029 | 7.5 | 13.89 | 12.94 | −12.0 | 1.0 | ..... | ..... | ..... | ..... | ..... |
| | 3030 | 13.2 | 14.78 | 13.83 | −21.7 | − 7.8 | ..... | ..... | ..... | ..... | ..... |
| | 3031 | 12.4 | 13.49 | 12.54 | −25.3 | −12.7 | ..... | ..... | ..... | ..... | ..... |
| | 3032 | 12.6 | 13.49 | 12.54 | −27.2 | −14.6 | ..... | ..... | ..... | ..... | ..... |
| | 3033 | 15.3 | 13.99 | 13.04 | −32.1 | −19.0 | ..... | ..... | ..... | ..... | ..... |
| | 3034 | − 9.9 | 14.68 | 13.73 | −30.2 | −16.4 | ..... | ..... | ..... | ..... | ..... |
| | 3035 | −16.9 | 14.38 | 13.43 | −43.5 | −30.0 | ..... | ..... | ..... | ..... | ..... |
| | 3036 | −10.1 | 14.68 | 13.73 | 7.4 | 21.2 | ..... | ..... | ..... | ..... | ..... |
| | 3037 | −13.5 | 13.59 | 12.64 | 7.0 | 19.7 | ..... | ..... | ..... | ..... | ..... |
| | 3038 | −18.6 | 13.89 | 12.94 | − 3.7 | 9.3 | ..... | ..... | ..... | ..... | ..... |
| 2733 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| June 6, '08 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 10h10m | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 2748 | 3040 | 12.9 | 15.80 | 14.85 | 18.7 | 32.6 | ..... | ..... | ..... | ..... | ..... |
| June 15, '08 | 3041 | 12.5 | 15.05 | 14.10 | 16.8 | 30.0 | ..... | ..... | ..... | ..... | ..... |
| 11h44m1 | 3042 | 10.5 | 13.77 | 12.82 | 13.7 | 25.7 | ..... | ..... | ..... | ..... | ..... |

TABLE I—*Continued*

| Plate Number and Date | Number | Latitude | Diurnal Motion | | Longitudes on Days of Observation | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sidereal | Synodic | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2748 (*cont.*) | 3043 | 9°.4 | 14°.73 | 13°.78 | 10°.0 | 22°.9 | ..... | ..... | ..... | ..... | ..... |
| | 3044 | 11.0 | 13.98 | 13.03 | 10.6 | 22.8 | ..... | ..... | ..... | ..... | ..... |
| | 3045 | 12.5 | 14.84 | 13.89 | 6.5 | 19.5 | ..... | ..... | ..... | ..... | ..... |
| | 3046 | 9.3 | 14.30 | 13.35 | 4.3 | 16.8 | ..... | ..... | ..... | ..... | ..... |
| | 3047 | 10.3 | 13.98 | 13.03 | 0.0 | 12.2 | ..... | ..... | ..... | ..... | ..... |
| | 3048 | 8.5 | 14.41 | 13.46 | − 1.0 | 11.6 | ..... | ..... | ..... | ..... | ..... |
| | 3049 | 6.1 | 13.98 | 13.03 | − 5.9 | 6.3 | ..... | ..... | ..... | ..... | ..... |
| | 3050 | 17.0 | 14.20 | 13.25 | −18.0 | − 5.6 | ..... | ..... | ..... | ..... | ..... |
| 2753 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| June 16, '08 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| $10^h12^m.2$ | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 2768 | 3051 | − 2.6 | 14.93 | 13.98 | 36.0 | 50.0 | ..... | ..... | ..... | ..... | ..... |
| June 24, '08 | 3052 | 3.2 | 14.63 | 13.68 | 30.5 | 44.2 | ..... | ..... | ..... | ..... | ..... |
| $9^h55^m.3$ | 3053 | 6.9 | 14.63 | 13.68 | 31.1 | 44.8 | ..... | ..... | ..... | ..... | ..... |
| | 3054 | 10.8 | 13.94 | 12.99 | 29.2 | 42.2 | ..... | ..... | ..... | ..... | ..... |
| | 3055 | −19.1 | 15.73 | 14.78 | 22.4 | 37.2 | ..... | ..... | ..... | ..... | ..... |
| | 3056 | −20.0 | 14.33 | 13.38 | 20.7 | 35.1 | ..... | ..... | ..... | ..... | ..... |
| | 3057 | −15.3 | 14.19 | 13.24 | 14.3 | 27.8 | 40°.5 | ..... | ..... | ..... | ..... |
| | 3058 | −22.6 | 13.78 | 12.83 | 11.2 | 24.5 | 36.6 | ..... | ..... | ..... | ..... |
| | 3059 | −23.5 | 15.13 | 14.18 | 14.0 | 28.2 | ..... | ..... | ..... | ..... | ..... |
| | 3060 | −19.8 | 15.13 | 14.18 | 18.6 | 32.8 | ..... | ..... | ..... | ..... | ..... |
| | 3061 | −18.3 | 14.03 | 13.08 | 4.8 | 17.6 | 30.7 | ..... | ..... | ..... | ..... |
| | 3062 | −21.5 | 14.89 | 13.94 | 0.0 | 13.8 | 27.6 | 41°.2 | ..... | ..... | ..... |
| | 3063 | −24.5 | 14.93 | 13.98 | 1.6 | 15.6 | ..... | ..... | ..... | ..... | ..... |
| | 3064 | −21.9 | 15.15 | 14.20 | − 5.6 | 9.2 | 22.5 | ..... | ..... | ..... | ..... |
| | 3065 | −19.7 | 14.93 | 13.98 | − 8.0 | 6.0 | ..... | ..... | ..... | ..... | ..... |
| | 3066 | −22.7 | 14.54 | 13.59 | − 8.7 | 5.8 | 18.2 | ..... | ..... | ..... | ..... |
| | 3067 | −26.1 | 15.23 | 14.28 | −11.0 | 3.3 | ..... | ..... | ..... | ..... | ..... |
| 2774 | 3068 | 3.8 | 14.22 | 13.27 | −35.3 | −22.5 | − 9.3 | ..... | ..... | ..... | ..... |
| June 25, '08 | 3069 | 3.8 | 14.54 | 13.59 | −31.3 | −18.0 | ..... | ..... | ..... | ..... | ..... |
| $9^h56^m.9$ | 3070 | 9.8 | 15.36 | 14.41 | −21.3 | − 7.2 | ..... | ..... | ..... | ..... | ..... |
| 2781 | 3072 | −24.5 | 14.11 | 13.16 | 23.1 | 36.0 | ..... | ..... | ..... | ..... | ..... |
| June 26, '08 | 3073 | −20.0 | 15.23 | 14.28 | 15.3 | 29.3 | ..... | ..... | ..... | ..... | ..... |
| $9^h26^m.0$ | 3074 | −16.8 | 13.70 | 12.75 | 11.7 | 24.2 | ..... | ..... | ..... | ..... | ..... |
| | 3075 | −20.4 | 14.72 | 13.77 | 19.1 | 32.6 | ..... | ..... | ..... | ..... | ..... |
| | 3075′ | −19.7 | 14.92 | 13.97 | 17.4 | 31.1 | ..... | ..... | ..... | ..... | ..... |
| | 3076 | −25.7 | 13.19 | 12.24 | 9.7 | 21.7 | ..... | ..... | ..... | ..... | ..... |
| | 3077 | −18.0 | 14.31 | 13.36 | − 4.6 | 8.5 | ..... | ..... | ..... | ..... | ..... |
| | 3078 | −19.9 | 15.13 | 14.18 | − 6.9 | 7.0 | ..... | ..... | ..... | ..... | ..... |
| | 3079 | −11.4 | 14.41 | 13.46 | − 7.0 | 6.2 | ..... | ..... | ..... | ..... | ..... |
| | 3080 | −10.7 | 15.64 | 14.69 | 1.4 | 15.8 | ..... | ..... | ..... | ..... | ..... |
| | 3081 | − 6.7 | 14.72 | 13.77 | −10.9 | 2.6 | ..... | ..... | ..... | ..... | ..... |
| | 3082 | − 5.5 | 14.52 | 13.57 | −15.3 | − 2.0 | ..... | ..... | ..... | ..... | ..... |
| | 3083 | 0.9 | 14.82 | 13.87 | −13.5 | 0.1 | ..... | ..... | ..... | ..... | ..... |
| | 3084 | −11.9 | 14.52 | 13.57 | −18.5 | − 5.2 | ..... | ..... | ..... | ..... | ..... |
| | 3085 | −16.8 | 14.31 | 13.36 | −20.1 | − 7.0 | ..... | ..... | ..... | ..... | ..... |
| | 3086 | −16.2 | 14.31 | 13.36 | −26.1 | −13.0 | ..... | ..... | ..... | ..... | ..... |
| | 3087 | − 6.3 | 14.41 | 13.46 | −24.3 | −11.1 | ..... | ..... | ..... | ..... | ..... |
| | 3088 | − 4.6 | 14.62 | 13.67 | −22.4 | − 9.0 | ..... | ..... | ..... | ..... | ..... |
| | 3089 | − 4.4 | 14.01 | 13.06 | −26.3 | −13.5 | ..... | ..... | ..... | ..... | ..... |
| | 3090 | − 2.3 | 15.03 | 14.08 | −34.8 | −21.0 | ..... | ..... | ..... | ..... | ..... |
| | 3091 | − 9.7 | 14.62 | 13.67 | −45.5 | −32.1 | ..... | ..... | ..... | ..... | ..... |
| | 3092 | 9.3 | 15.03 | 14.08 | − 8.2 | 5.6 | ..... | ..... | ..... | ..... | ..... |
| | 3093 | −11.2 | 14.41 | 13.46 | −32.0 | −18.8 | ..... | ..... | ..... | ..... | ..... |
| | 3094 | − 0.2 | 14.62 | 13.67 | −40.7 | −27.3 | ..... | ..... | ..... | ..... | ..... |
| 2789 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| June 27, '08 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| $8^h57^m.7$ | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 2805 | 3097 | −12.0 | 14.64 | 13.69 | 14.1 | 27.8 | 44.3 | ..... | ..... | ..... | ..... |
| July 8, '08 | 3098 | − 8.9 | 14.45 | 13.50 | 10.4 | 24.1 | 40.1 | 51.8 | ..... | ..... | ..... |
| $9^h21^m$ | 3099 | −21.6 | 14.50 | 13.55 | − 3.0 | 10.7 | 26.9 | ..... | ..... | ..... | ..... |

TABLE I—*Continued*

| Plate Number and Date | Number | Latitude | Diurnal Motion | | Longitudes on Days of Observation | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sidereal | Synodic | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2805 (*cont.*) | 3100 | −21°2 | 14°24 | 13°29 | − 8°5 | 4°5 | 20°8 | ..... | ..... | ..... | ..... |
| | 3101 | −21.5 | 14.60 | 13.65 | −10.3 | 3.0 | 19.9 | 31°3 | ..... | ..... | ..... |
| | 3102 | −18.3 | 14.73 | 13.78 | −11.2 | 2.0 | 19.0 | 30.8 | ..... | ..... | ..... |
| | 3103 | −21.6 | 14.55 | 13.60 | −13.8 | − 0.4 | 16.2 | ..... | ..... | ..... | ..... |
| | 3104 | −20.7 | 13.86 | 12.91 | −16.4 | − 3.2 | 12.1 | ..... | ..... | ..... | ..... |
| | 3105 | −21.0 | 14.22 | 13.27 | −20.0 | − 6.7 | ..... | ..... | ..... | ..... | ..... |
| | 3106 | −18.8 | 13.82 | 12.87 | −18.1 | − 5.2 | ..... | ..... | ..... | ..... | ..... |
| | 3107 | 11.6 | 14.63 | 13.68 | − 1.2 | 12.8 | 29.0 | ..... | ..... | ..... | ..... |
| | 3108 | 14.1 | 14.95 | 14.00 | − 6.9 | 7.5 | 24.0 | ..... | ..... | ..... | ..... |
| | 3109 | 13.5 | 14.72 | 13.77 | − 8.5 | 5.3 | ..... | ..... | ..... | ..... | ..... |
| | 3110 | 19.4 | 14.64 | 13.69 | −12.7 | 1.3 | 17.9 | 29.1 | ..... | ..... | ..... |
| | 3111 | 16.6 | 14.16 | 13.21 | −14.3 | − 0.2 | 15.6 | 26.1 | ..... | ..... | ..... |
| | 3112 | 14.7 | 14.82 | 13.87 | −14.4 | − 0.5 | ..... | ..... | ..... | ..... | ..... |
| | 3113 | 13.4 | 14.52 | 13.57 | −14.5 | − 1.5 | 15.2 | 26.9 | ..... | ..... | ..... |
| | 3114 | 18.5 | 15.09 | 14.14 | −17.4 | − 3.1 | 13.8 | ..... | ..... | ..... | ..... |
| | 3115 | 16.1 | 14.49 | 13.54 | −17.0 | − 3.0 | 12.9 | ..... | ..... | ..... | ..... |
| | 3116 | 13.5 | 14.33 | 13.38 | −16.9 | − 3.8 | 12.6 | ..... | ..... | ..... | ..... |
| | 3117 | 10.8 | 14.39 | 13.44 | −18.3 | − 5.7 | 11.3 | ..... | ..... | ..... | ..... |
| | 3118 | 11.5 | 14.78 | 13.83 | −28.5 | −15.0 | 2.0 | ..... | ..... | ..... | ..... |
| | 3119 | 11.8 | 14.53 | 13.58 | −32.6 | −19.9 | − 2.7 | ..... | ..... | ..... | ..... |
| 2809 | 3120 | −21.7 | 15.06 | 14.11 | − 9.5 | 7.5 | ..... | ..... | ..... | ..... | ..... |
| July 9, '08 | 3121 | −22.4 | 14.22 | 13.27 | − 7.1 | 9.6 | 20.1 | ..... | ..... | ..... | ..... |
| $9^h23^m8$ | 3122 | −18.9 | 14.24 | 13.29 | − 8.0 | 8.3 | 19.3 | ..... | ..... | ..... | ..... |
| | 3123 | 9.3 | 14.48 | 13.53 | −18.3 | − 2.0 | ..... | ..... | ..... | ..... | ..... |
| | 3124 | 7.1 | 14.52 | 13.57 | −23.8 | − 7.3 | 4.1 | ..... | ..... | ..... | ..... |
| | 3125 | − 8.1 | 15.55 | 14.61 | −27.0 | − 9.4 | ..... | ..... | ..... | ..... | ..... |
| | 3126 | − 7.2 | 14.65 | 13.70 | −24.3 | − 7.8 | ..... | ..... | ..... | ..... | ..... |
| 2813 | 3127 | 11.1 | 14.68 | 13.73 | 26.1 | 37.8 | ..... | ..... | ..... | ..... | ..... |
| July 10, '08 | 3128 | 15.0 | 14.56 | 13.61 | 24.8 | 36.4 | ..... | ..... | ..... | ..... | ..... |
| $2^h18^m0$ | 3129 | 14.6 | 14.33 | 13.38 | 20.9 | 32.3 | ..... | ..... | ..... | ..... | ..... |
| | 3130 | 15.2 | 14.21 | 13.26 | 23.0 | 34.3 | ..... | ..... | ..... | ..... | ..... |
| | 3131 | 17.0 | 14.09 | 13.14 | 24.0 | 35.2 | ..... | ..... | ..... | ..... | ..... |
| | 3132 | 12.3 | 14.92 | 13.97 | 10.3 | 22.2 | ..... | ..... | ..... | ..... | ..... |
| | 3133 | 9.4 | 13.98 | 13.03 | 15.1 | 26.2 | ..... | ..... | ..... | ..... | ..... |
| | 3134 | 13.5 | 14.09 | 13.14 | − 3.0 | 8.2 | ..... | ..... | ..... | ..... | ..... |
| | 3135 | 10.6 | 14.09 | 13.14 | −21.7 | 10.5 | ..... | ..... | ..... | ..... | ..... |
| | 3136 | 6.3 | 15.62 | 14.67 | −34.8 | −22.3 | ..... | ..... | ..... | ..... | ..... |
| | 3137 | 6.3 | 13.86 | 12.91 | −35.2 | −24.2 | ..... | ..... | ..... | ..... | ..... |
| | 3138 | 8.7 | 13.98 | 13.03 | 23.8 | 34.9 | ..... | ..... | ..... | ..... | ..... |
| 2820 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| July 11, '08 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| $10^h45^m6$ | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 2824 | 3139 | − 0.9 | 14.51 | 13.56 | − 0.3 | 13.5 | ..... | ..... | ..... | ..... | ..... |
| July 14, '08 | 3140 | 1.0 | 14.61 | 13.66 | 1.9 | 15.8 | ..... | ..... | ..... | ..... | ..... |
| $10^h08^m0$ | 3141 | 3.7 | 14.31 | 13.36 | 4.3 | 17.9 | ..... | ..... | ..... | ..... | ..... |
| | 3143 | 5.9 | 13.92 | 12.97 | −12.7 | 0.5 | ..... | ..... | ..... | ..... | ..... |
| | 3144 | −18.2 | 14.80 | 13.85 | −16.8 | − 2.7 | ..... | ..... | ..... | ..... | ..... |
| | 3145 | −16.6 | 13.92 | 12.97 | −22.2 | − 9.0 | ..... | ..... | ..... | ..... | ..... |
| | 3146 | −18.7 | 13.72 | 12.77 | −35.6 | −22.6 | ..... | ..... | ..... | ..... | ..... |
| | 3147 | −14.3 | 13.92 | 12.97 | −35.4 | −22.2 | ..... | ..... | ..... | ..... | ..... |
| | 3148 | − 9.0 | 14.12 | 13.17 | −35.5 | −22.1 | ..... | ..... | ..... | ..... | ..... |
| | 3149 | − 9.3 | 14.05 | 13.07 | −46.3 | −33.0 | ..... | ..... | ..... | ..... | ..... |
| | 3150 | −23.3 | 14.31 | 13.36 | − 7.2 | 6.4 | ..... | ..... | ..... | ..... | ..... |
| 2837 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| July 15, '08 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| $10^h33^m6$ | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 2840 | 3151 | 18.0 | 14.92 | 13.97 | 32.0 | 45.5 | ..... | ..... | ..... | ..... | ..... |
| July 21, '08 | 3152 | −16.0 | 14.41 | 13.46 | 25.1 | 38.1 | ..... | ..... | ..... | ..... | ..... |
| $10^h16^m2$ | 3153 | −16.6 | 14.30 | 13.35 | 20.6 | 33.5 | ..... | ..... | ..... | ..... | ..... |
| | 3154 | − 6.3 | 13.06 | 12.11 | 24.6 | 36.3 | ..... | ..... | ..... | ..... | ..... |

TABLE I—*Continued*

| Plate Number and Date | Number | Latitude | Diurnal Motion | | Longitudes on Days of Observation | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sidereal | Synodic | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2840 (*cont.*) | 3155 | −23°.4 | 13°.99 | 13°.04 | 22°.7 | 35°.3 | ..... | ..... | ..... | ..... | ..... |
| | 3156 | −12.8 | 15.13 | 14.18 | 12.7 | 26.4 | ..... | ..... | ..... | ..... | ..... |
| | 3157 | −19.2 | 14.20 | 13.25 | 14.0 | 26.8 | ..... | ..... | ..... | ..... | ..... |
| | 3158 | −25.5 | 13.99 | 13.04 | 17.4 | 30.0 | ..... | ..... | ..... | ..... | ..... |
| | 3159 | −23.8 | 13.37 | 12.42 | 15 0 | 27.0 | ..... | ..... | ..... | ..... | ..... |
| | 3160 | −24.7 | 12.85 | 11.90 | 14.1 | 25.6 | ..... | ..... | ..... | ..... | ..... |
| | 3161 | −23.3 | 13.58 | 12.63 | 12.3 | 24.5 | ..... | ..... | ..... | ..... | ..... |
| | 3162 | −19.2 | 14.10 | 13.15 | 7.8 | 20.5 | ..... | ..... | ..... | ..... | ..... |
| | 3163 | −27.0 | 14.20 | 13.25 | 8.3 | 20.8 | ..... | ..... | ..... | ..... | ..... |
| | 3165 | −13.1 | 13.99 | 13.04 | − 6.8 | 5.8 | ..... | ..... | ..... | ..... | ..... |
| | 3166 | −18.9 | 13.78 | 12.83 | −11.1 | 1.3 | ..... | ..... | ..... | ..... | ..... |
| | 3167 | −22.1 | 13.68 | 12.73 | − 9.0 | 3.3 | ..... | ..... | ..... | ..... | ..... |
| | 3168 | −20.2 | 13.27 | 12.32 | −13.1 | − 1.2 | ..... | ..... | ..... | ..... | ..... |
| | 3169 | −13.2 | 13.68 | 12.73 | −12.2 | 0.1 | ..... | ..... | ..... | ..... | ..... |
| | 3170 | − 7.0 | 13.06 | 12.11 | −22.5 | −10.8 | ..... | ..... | ..... | ..... | ..... |
| | 3171 | − 0.6 | 13.99 | 13.04 | −16.6 | − 4.0 | ..... | ..... | ..... | ..... | ..... |
| | 3172 | −13.8 | 14.41 | 13.46 | 15.8 | 28.8 | ..... | ..... | ..... | ..... | ..... |
| | 3173 | 1.5 | 13.78 | 12.83 | −36.1 | −23.7 | ..... | ..... | ..... | ..... | ..... |
| | 3174 | 3.5 | 13.47 | 12.52 | −35.5 | −23.4 | ..... | ..... | ..... | ..... | ..... |
| 2845 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| July 22, '08 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| $9^h27^m.4$ | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 2862 | 3175 | 8.3 | 15.08 | 14.12 | 31.1 | 45.1 | ..... | ..... | ..... | ..... | ..... |
| July 27, '08 | 3176 | 11.2 | 14.88 | 13.92 | 25.3 | 39.1 | ..... | ..... | ..... | ..... | ..... |
| $9^h44^m.2$ | 3177 | 2.2 | 14.78 | 13.82 | 25.1 | 38.8 | ..... | ..... | ..... | ..... | ..... |
| | 3178 | − 2.0 | 13.77 | 12.81 | 30.1 | 42.8 | ..... | ..... | ..... | ..... | ..... |
| | 3179 | − 4.9 | 14.58 | 13.62 | 25.4 | 38.9 | ..... | ..... | ..... | ..... | ..... |
| | 3180 | − 9.5 | 14.48 | 13.52 | 14.7 | 28.1 | ..... | ..... | ..... | ..... | ..... |
| | 3181 | − 7.0 | 14.44 | 13.48 | 9.2 | 21.6 | 37°.2 | ..... | ..... | ..... | ..... |
| | 3182 | − 4.2 | 14.59 | 13.63 | 7.6 | 22.8 | 36.0 | ..... | ..... | ..... | ..... |
| | 3183 | 3.3 | 15.08 | 14.12 | 10.0 | 24.0 | ..... | ..... | ..... | ..... | ..... |
| | 3184 | 18.3 | 13.57 | 12.61 | 9.3 | 21.8 | ..... | ..... | ..... | ..... | ..... |
| | 3185 | 3.8 | 14.58 | 13.62 | 15.2 | 28.7 | ..... | ..... | ..... | ..... | ..... |
| | 3186 | −19.3 | 15.79 | 14.83 | 7.3 | 22.0 | ..... | ..... | ..... | ..... | ..... |
| | 3187 | −15.0 | 14.18 | 13.22 | − 4.0 | 9.1 | ..... | ..... | ..... | ..... | ..... |
| | 3188 | −18.8 | 14.68 | 13.72 | − 3.1 | 10.5 | ..... | ..... | ..... | ..... | ..... |
| | 3189 | −27.8 | 14.58 | 13.62 | − 7.0 | 6.5 | ..... | ..... | ..... | ..... | ..... |
| | 3190 | −26.4 | 13.94 | 12.98 | −11.8 | 1.5 | 15.5 | ..... | 40°.9 | ..... | ..... |
| | 3191 | −24.5 | 15.79 | 14.83 | − 9.8 | 4.9 | ..... | ..... | ..... | ..... | ..... |
| | 3192 | −24.5 | 14.06 | 13.10 | −20.7 | − 7.1 | 7.0 | ..... | 32.5 | ..... | ..... |
| | 3193 | −17.0 | 14.98 | 14.02 | −13.7 | 0.2 | ..... | ..... | ..... | ..... | ..... |
| | 3194 | −14.4 | 14.52 | 13.56 | −12.2 | 1.3 | 16.0 | ..... | ..... | ..... | ..... |
| | 3195 | −12.5 | 14.78 | 13.82 | −14.2 | − 0.5 | ..... | ..... | ..... | ..... | ..... |
| | 3196 | −11.7 | 14.48 | 13.52 | −17.1 | − 3.7 | ..... | ..... | ..... | ..... | ..... |
| | 3197 | − 3.7 | 14.90 | 13.94 | −15.8 | − 1.8 | 13.2 | ..... | ..... | ..... | ..... |
| | 3198 | 12.9 | 14.98 | 14.02 | −12.1 | 1.8 | ..... | ..... | ..... | ..... | ..... |
| | 3199 | 15.1 | 14.26 | 13.30 | −34.0 | −20.9 | − 6.5 | ..... | 19.4 | 32°.5 | ..... |
| | 3200 | 17.2 | 14.28 | 13.32 | −36.7 | −23.4 | − 9.0 | ..... | ..... | ..... | ..... |
| | 3201 | 18.5 | 14.28 | 13.32 | −40.3 | −27.1 | ..... | ..... | ..... | ..... | ..... |
| | 3202 | −19.2 | 14.17 | 13.21 | −35.3 | −21.6 | 7.8 | ..... | ..... | ..... | ..... |
| | 3203 | −19.2 | 14.37 | 13.41 | −38.3 | −24.5 | −10.4 | ..... | ..... | ..... | ..... |
| | 3204 | −16.6 | 14.48 | 13.52 | −39.3 | −25.9 | ..... | ..... | ..... | ..... | ..... |
| 2876 | 3205 | −22.4 | 14.28 | 13.32 | −28.0 | −13.5 | ..... | ..... | ..... | ..... | ..... |
| July 28, '08 | 3206 | −14.9 | 14.44 | 13.48 | −17.9 | − 3.1 | ..... | 23°.1 | 36.1 | ..... | ..... |
| $9^h31^m.5$ | 3207 | −13.3 | 14.01 | 13.05 | −10.1 | 4.1 | ..... | ..... | ..... | ..... | ..... |
| | 3208 | −16.4 | 14.46 | 13.50 | − 6.8 | 7.3 | ..... | 34.4 | ..... | ..... | ..... |
| | 3209 | 32.0 | 13.18 | 12.22 | −36.0 | −22.7 | ..... | ..... | ..... | ..... | ..... |
| | 3210 | 14.6 | 13.94 | 12.98 | −32.0 | −17.3 | ..... | 7.8 | ..... | ..... | ..... |
| 2884 | 3211 | 15.6 | 14.16 | 13.20 | −14.0 | ..... | 11.8 | 24.4 | ..... | ..... | ..... |
| July 29, '08 | 3212 | 10.7 | 14.62 | 13.66 | −11.5 | ..... | 15.3 | 28.2 | ..... | ..... | ..... |
| $11^h38^m.8$ | 3213 | −16.8 | 14.82 | 13.86 | −12.0 | ..... | 15.2 | 28.3 | ..... | ..... | ..... |
| 2889 | 3214 | −22.8 | 14.79 | 13.83 | 11.9 | 24.8 | ..... | ..... | ..... | ..... | ..... |
| July 31, '08 | 3215 | −21.0 | 12.75 | 11.79 | 17.6 | 28.6 | ..... | ..... | ..... | ..... | ..... |
| $10^h57^m.1$ | 3216 | 17.0 | 14.57 | 13.61 | 18.7 | 31.4 | ..... | ..... | ..... | ..... | ..... |

TABLE I—*Continued*

| Plate Number and Date | Number | Latitude | Diurnal Motion | | Longitudes on Days of Observation | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sidereal | Synodic | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2889 (*cont.*) | 3217 | 20°.4 | 14°.04 | 13°.08 | 11°.8 | 24°.0 | ..... | ..... | ..... | ..... | ..... |
| | 3218 | 13.3 | 14.89 | 13.93 | − 6.2 | 6.8 | ..... | ..... | ..... | ..... | ..... |
| | 3219 | 15.1 | 14.14 | 13.18 | − 8.0 | 4.3 | ..... | ..... | ..... | ..... | ..... |
| | 3220 | 9.2 | 13.21 | 12.25 | − 5.8 | 7.1 | ..... | 30°.8 | ..... | ..... | ..... |
| | 3221 | 10.6 | 14.25 | 13.29 | − 6.0 | 6.4 | ..... | ..... | ..... | ..... | ..... |
| | 3222 | 17.6 | 14.14 | 13.18 | −23.1 | −10.8 | ..... | ..... | ..... | ..... | ..... |
| 2894 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Aug. 1, '08 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| $9^h20^m.7$ | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 2903 | 3223 | − 9.5 | 14.64 | 13.68 | − 3.9 | 12.1 | 22°.9 | ..... | ..... | ..... | ..... |
| Aug. 3, '08 | 3224 | 12.3 | 13.85 | 12.89 | −14.2 | 1.2 | 11.0 | ..... | ..... | ..... | ..... |
| $10^h01^m.0$ | 3225 | 14.0 | 13.99 | 13.03 | −28.2 | −12.8 | − 2.7 | ..... | ..... | ..... | ..... |
| | 3226 | 16.8 | 14.24 | 13.28 | −28.9 | −12.7 | − 3.0 | ..... | ..... | ..... | ..... |
| | 3227 | 11.5 | 14.74 | 13.78 | −32.7 | −16.1 | − 5.8 | ..... | ..... | ..... | ..... |
| | 3228 | 6.4 | 14.34 | 13.38 | −39.3 | −23.0 | −13.2 | ..... | ..... | ..... | ..... |
| | 3229 | 7.4 | 14.09 | 13.13 | −41.3 | −25.2 | −15.7 | ..... | ..... | ..... | ..... |
| | 3230 | 8.4 | 14.88 | 13.92 | −43.8 | −27.2 | ..... | ..... | ..... | ..... | ..... |
| | 3231 | −16.7 | 14.34 | 13.38 | −43.3 | −27.0 | −17.2 | ..... | ..... | ..... | ..... |
| 2912 | 3232 | − 8.7 | 14.07 | 13.11 | 10.9 | 20.9 | ..... | ..... | ..... | ..... | ..... |
| Aug. 4, '08 | 3233 | −17.4 | 14.34 | 13.38 | 11.1 | 21.3 | ..... | ..... | ..... | ..... | ..... |
| $2^h37^m.8$ | 3234 | −15.0 | 14.21 | 13.25 | 8.9 | 19.0 | ..... | ..... | ..... | ..... | ..... |
| | 3235 | −18.9 | 13.16 | 13.20 | 7.5 | 16.8 | ..... | ..... | ..... | ..... | ..... |
| | 3236 | −29.0 | 13.68 | 12.72 | 12.6 | 22.3 | ..... | ..... | ..... | ..... | ..... |
| | 3237 | −21.5 | 13.81 | 12.85 | 5.7 | 15.5 | ..... | ..... | ..... | ..... | ..... |
| | 3238 | −19.8 | 14.47 | 13.51 | 3.4 | 13.7 | ..... | ..... | ..... | ..... | ..... |
| | 3239 | −21.5 | 13.29 | 12.33 | − 0.2 | 9.2 | ..... | ..... | ..... | ..... | ..... |
| | 3240 | −23.1 | 14.47 | 13.51 | − 3.5 | 6.8 | ..... | ..... | ..... | ..... | ..... |
| | 3241 | −24.8 | 13.16 | 12.20 | − 6.8 | 2.5 | ..... | ..... | ..... | ..... | ..... |
| | 3242 | −27.4 | 13.55 | 12.59 | − 8.6 | 1.0 | ..... | ..... | ..... | ..... | ..... |
| | 3243 | −26.1 | 12.89 | 11.93 | −13.1 | − 4.0 | ..... | ..... | ..... | ..... | ..... |
| | 3244 | −23.5 | 13.81 | 12.85 | − 9.5 | 0.3 | ..... | ..... | ..... | ..... | ..... |
| | 3245 | −20.1 | 13.29 | 12.33 | − 9.4 | 0.0 | ..... | ..... | ..... | ..... | ..... |
| | 3246 | −19.8 | 13.03 | 12.07 | − 5.7 | 3.5 | ..... | ..... | ..... | ..... | ..... |
| | 3247 | −15.0 | 14.21 | 13.25 | −14.4 | − 4.3 | ..... | ..... | ..... | ..... | ..... |
| | 3248 | −13.5 | 13.42 | 12.46 | − 0.1 | 9.4 | ..... | ..... | ..... | ..... | ..... |
| | 3249 | −10.2 | 13.94 | 12.98 | 3.2 | 13.1 | ..... | ..... | ..... | ..... | ..... |
| | 3250 | −14.1 | 13.68 | 12.72 | 5.3 | 15.0 | ..... | ..... | ..... | ..... | ..... |
| | 3251 | −16.6 | 13.16 | 12.20 | −25.0 | −15.7 | ..... | ..... | ..... | ..... | ..... |
| | 3252 | −15.2 | 13.16 | 12.20 | −31.5 | −22.2 | ..... | ..... | ..... | ..... | ..... |
| | 3253 | − 9.3 | 14.34 | 13.38 | −37.3 | −27.1 | ..... | ..... | ..... | ..... | ..... |
| | 3254 | 4.6 | 14.47 | 13.51 | 2.9 | 13.2 | ..... | ..... | ..... | ..... | ..... |
| | 3255 | 5.6 | 13.94 | 12.98 | 1.2 | 11.1 | ..... | ..... | ..... | ..... | ..... |
| | 3256 | 14.7 | 13.94 | 12.98 | − 0.9 | 9.0 | ..... | ..... | ..... | ..... | ..... |
| | 3257 | 17.9 | 14.34 | 13.38 | − 1.8 | 8.4 | ..... | ..... | ..... | ..... | ..... |
| | 3258 | 21.6 | 13.55 | 12.59 | −11.6 | − 2.0 | ..... | ..... | ..... | ..... | ..... |
| | 3259 | 19.8 | 14.07 | 13.11 | −17.0 | − 7.0 | ..... | ..... | ..... | ..... | ..... |
| | 3260 | 14.8 | 14.07 | 13.11 | −20.0 | −10.0 | ..... | ..... | ..... | ..... | ..... |
| | 3261 | 8.2 | 14.21 | 13.25 | −17.9 | − 7.8 | ..... | ..... | ..... | ..... | ..... |
| | 3262 | 7.6 | 13.68 | 12.72 | −29.4 | −19.7 | ..... | ..... | ..... | ..... | ..... |
| | 3263 | 10.4 | 13.81 | 12.85 | −27.0 | −17.2 | ..... | ..... | ..... | ..... | ..... |
| | 3264 | 12.4 | 14.07 | 13.11 | −29.6 | −19.6 | ..... | ..... | ..... | ..... | ..... |
| | 3265 | 17.5 | 13.81 | 12.85 | −42.0 | −32.2 | ..... | ..... | ..... | ..... | ..... |
| | 3266 | 20.3 | 14.07 | 13.11 | −44.9 | −34.9 | ..... | ..... | ..... | ..... | ..... |
| | 3267 | 17.5 | 13.81 | 12.85 | 31.8 | 41.6 | ..... | ..... | ..... | ..... | ..... |
| 2915 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Aug. 5, '08 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| $8^h55^m.8$ | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 2946 | 3269 | 9.2 | 14.86 | 13.89 | 11.5 | 26.7 | ..... | ..... | ..... | ..... | ..... |
| Aug. 13, '08 | 3270 | 6.0 | 13.58 | 12.61 | 11.9 | 25.7 | ..... | ..... | ..... | ..... | ..... |
| $9^h32^m.8$ | 3271 | 7.7 | 14.50 | 13.53 | 8.4 | 23.2 | ..... | ..... | ..... | ..... | ..... |
| | 3272 | 9.2 | 13.95 | 12.98 | 6.0 | 20.2 | ..... | ..... | ..... | ..... | ..... |

TABLE I—*Continued*

| Plate Number and Date | Number | Latitude | Diurnal Motion | | Longitudes on Date of Observation | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sidereal | Synodic | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2946 (*cont.*) | 3273 | 11°6 | 14°50 | 13°53 | 7°1 | 21°9 | | | | | |
| | 3274 | 13.6 | 13.95 | 12.98 | 2.2 | 16.4 | | | | | |
| | 3275 | 11.7 | 14.77 | 13.80 | − 2.2 | 12.9 | | | | | |
| | 3276 | 10.4 | 14.04 | 13.07 | − 6.1 | 8.2 | | | | | |
| | 3277 | 12.0 | 14.04 | 13.07 | − 7.1 | 7.2 | | | | | |
| | 3278 | 10.8 | 14.68 | 13.71 | −10.7 | 4.3 | | | | | |
| | 3279 | 14.9 | 14.22 | 13.25 | −14.6 | − 0.1 | | | | | |
| | 3280 | 15.8 | 14.50 | 13.53 | −21.0 | − 6.2 | | | | | |
| | 3281 | 14.3 | 13.68 | 12.71 | −22.6 | − 8.7 | | | | | |
| | 3282 | 10.0 | 14.41 | 13.44 | −24.8 | −10.1 | | | | | |
| | 3283 | −16.6 | 14.86 | 13.89 | 5.3 | 20.5 | | | | | |
| | 3284 | −19.5 | 15.05 | 14.08 | 4.6 | 20.0 | | | | | |
| | 3285 | −19.7 | 13.95 | 12.98 | −10.1 | 4.1 | | | | | |
| | 3286 | − 6.7 | 14.50 | 13.53 | − 2.7 | 12.1 | | | | | |
| | 3287 | − 3.3 | 13.95 | 12.98 | − 5.0 | 9.2 | | | | | |
| | 3288 | − 3.1 | 13.77 | 12.80 | − 9.8 | 4.2 | | | | | |
| | 3289 | − 3.6 | 14.04 | 13.07 | −13.6 | 0.7 | | | | | |
| | 3290 | −19.7 | 14.22 | 13.25 | −23.7 | − 9.2 | | | | | |
| | 3291 | −16.9 | 13.77 | 12.80 | −25.8 | −11.8 | | | | | |
| | 3292 | −20.7 | 13.86 | 12.89 | −27.3 | −13.2 | | | | | |
| | 3293 | −20.9 | 14.41 | 13.44 | −31.2 | −16.5 | | | | | |
| | 3294 | −18.5 | 13.49 | 12.52 | −29.7 | −16.0 | | | | | |
| | 3295 | −21.0 | 14.50 | 13.53 | −44.8 | −30.0 | | | | | |
| 2955 | | | | | | | | | | | |
| Aug. 14, '08 | | | | | | | | | | | |
| 11ʰ48ᵐ2 | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| 2968 | 3296 | −13.1 | 14.55 | 13.58 | 32.5 | 45.3 | | | | | |
| Aug. 21, '08 | 3297 | −17.7 | 14.23 | 13.26 | 30.9 | 43.4 | | | | | |
| 10ʰ39ᵐ5 | 3298 | −10.2 | 14.23 | 13.26 | 27.6 | 40.1 | | | | | |
| | 3299 | −20.2 | 14.76 | 13.79 | 18.9 | 31.9 | | | | | |
| | 3300 | −18.2 | 14.87 | 13.90 | 16.0 | 29.1 | | | | | |
| | 3301 | 4.9 | 14.76 | 13.79 | 23.0 | 36.0 | | | | | |
| | 3302 | 3.6 | 14.76 | 13.79 | 21.4 | 34.4 | | | | | |
| | 3303 | 5.4 | 14.23 | 13.26 | 20.6 | 33.1 | | | | | |
| | 3304 | 5.1 | 15.29 | 14.32 | 18.2 | 31.7 | | | | | |
| | 3305 | 7.8 | 15.08 | 14.11 | 17.8 | 31.1 | | | | | |
| | 3306 | 15.1 | 14.02 | 13.05 | 22.6 | 34.9 | | | | | |
| | 3307 | 21.9 | 14.76 | 13.79 | 20.8 | 33.8 | | | | | |
| | 3308 | 17.0 | 14.55 | 13.58 | 18.0 | 30.8 | | | | | |
| | 3309 | 15.9 | 13.81 | 12.84 | 12.9 | 25.0 | | | | | |
| | 3310 | 17.9 | 13.91 | 12.94 | 10.3 | 22.5 | | | | | |
| | 3311 | 18.2 | 14.65 | 13.68 | 14.4 | 27.3 | | | | | |
| | 3312 | 16.2 | 14.55 | 13.58 | 17.1 | 29.9 | | | | | |
| | 3313 | 0.2 | 14.55 | 13.58 | 7.8 | 20.6 | | | | | |
| | 3314 | − 2.8 | 14.02 | 13.05 | 4.9 | 17.2 | | | | | |
| | 3315 | − 3.2 | 13.70 | 12.73 | 0.9 | 12.9 | | | | | |
| | 3316 | −17.6 | 14.44 | 13.47 | 2.2 | 14.9 | | | | | |
| | 3317 | 3.3 | 13.91 | 12.94 | − 4.0 | 8.2 | | | | | |
| | 3318 | − 2.5 | 15.18 | 14.21 | −12.0 | 1.4 | | | | | |
| | 3319 | − 5.8 | 15.08 | 14.11 | −13.3 | 0.0 | | | | | |
| | 3320′ | − 7.4 | 14.55 | 13.58 | −11.0 | 1.8 | | | | | |
| | 3321 | −10.0 | 14.76 | 13.79 | −12.0 | 1.0 | | | | | |
| | 3322 | − 8.1 | 15.40 | 14.43 | −19.3 | − 5.7 | | | | | |
| | 3323 | −17.9 | 14.34 | 13.37 | −22.9 | −10.3 | | | | | |
| | 3324 | −18.0 | 14.34 | 13.37 | −31.9 | −19.3 | | | | | |
| | 3325 | −20.7 | 14.02 | 13.05 | −40.1 | −27.8 | | | | | |
| | 3326 | −18.3 | 14.12 | 13.15 | −38.9 | −26.5 | | | | | |
| | 3327 | −12.3 | 14.55 | 13.58 | −36.0 | −23.2 | | | | | |
| | 3328 | 7.3 | 13.27 | 12.30 | −18.2 | − 6.6 | | | | | |
| | 3328′ | 4.5 | 15.18 | 14.21 | −13.1 | 0.3 | | | | | |
| | 3329 | − 1.1 | 15.71 | 14.74 | 16.0 | 29.9 | | | | | |
| | 3330 | − 3.5 | 15.50 | 14.53 | 23.0 | 36.7 | | | | | |
| 2971 | | | | | | | | | | | |
| Aug. 22, '08 | | | | | | | | | | | |
| 9ʰ17ᵐ0 | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |

TABLE I—*Continued*

| Plate Number and Date | Number | Latitude | Diurnal Motion | | Longitudes on Days of Observation | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sidereal | Synodic | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2979 | 3331 | −12°.4 | 14°.94 | 13°.97 | 17°.0 | 33°.4 | 44°.3 | ..... | ..... | ..... | ..... |
| Aug. 25, '08 | 3332 | −14.2 | 14.83 | 13.86 | 14.6 | 30.8 | 41.7 | ..... | ..... | ..... | ..... |
| $10^h43^m.3$ | 3333 | −11.0 | 15.00 | 14.03 | 14.6 | 31.1 | 42.0 | ..... | ..... | ..... | ..... |
| | 3334 | −10.6 | 14.51 | 13.54 | 12.6 | 28.9 | 39.0 | ..... | ..... | ..... | ..... |
| | 3335 | −11.2 | 14.77 | 13.80 | 11.0 | 27.4 | ..... | ..... | ..... | ..... | ..... |
| | 3336 | −14.1 | 14.47 | 13.50 | 7.8 | 23.5 | 34.2 | ..... | ..... | ..... | ..... |
| | 3337 | −16.9 | 14.45 | 13.48 | −13.4 | 2.0 | 12.2 | 26°.8 | ..... | ..... | ..... |
| | 3338 | −18.6 | 14.50 | 13.53 | −17.3 | − 0.7 | 9.1 | 23.1 | ..... | ..... | ..... |
| | 3339 | −30.1 | 15.28 | 14.31 | −19.3 | − 2.3 | ..... | ..... | ..... | ..... | ..... |
| | 3341 | 17.8 | 13.93 | 12.96 | − 8.3 | 7.1 | ..... | ..... | ..... | ..... | ..... |
| | 3342 | 10.4 | 14.18 | 13.21 | −36.5 | −20.8 | ..... | ..... | ..... | ..... | ..... |
| | 3343 | 9.9 | 14.27 | 13.30 | −38.0 | −22.2 | ..... | ..... | ..... | ..... | ..... |
| | 3344 | 10.4 | 14.84 | 13.87 | −40.8 | −24.5 | −13.7 | ..... | ..... | ..... | ..... |
| | 3345 | 10.1 | 14.73 | 13.76 | −43.0 | −26.9 | −16.1 | ..... | ..... | ..... | ..... |
| 2986 | 3346 | − 6.8 | 15.39 | 14.41 | 30.2 | 41.2 | ..... | ..... | ..... | ..... | ..... |
| Aug. 26, '08 | 3347 | −18.5 | 14.87 | 13.89 | 29.9 | 40.5 | ..... | ..... | ..... | ..... | ..... |
| $3^h14^m.5$ | 3348 | −19.8 | 14.94 | 13.96 | − 1.3 | 9.6 | 23.7 | ..... | ..... | ..... | ..... |
| | 3349 | −23.9 | 14.85 | 13.87 | − 2.5 | 8.0 | 22.3 | ..... | ..... | ..... | ..... |
| | 3350 | −22.1 | 14.20 | 13.22 | − 6.4 | 3.2 | 17.2 | ..... | ..... | ..... | ..... |
| | 3351 | −16.6 | 14.61 | 13.63 | 20.6 | 31.0 | ..... | ..... | ..... | ..... | ..... |
| | 3352 | −18.7 | 14.12 | 13.14 | − 5.7 | 4.2 | 17.9 | 30.3 | ..... | ..... | ..... |
| | 3353 | −16.1 | 14.54 | 13.56 | −13.6 | − 2.8 | 10.7 | ..... | ..... | ..... | ..... |
| | 3354 | 9.5 | 14.22 | 13.24 | −19.5 | − 8.8 | 4.5 | 17.0 | ..... | ..... | ..... |
| | 3355 | − 6.0 | 15.29 | 14.31 | 20.0 | 30.9 | 45.6 | ..... | ..... | ..... | ..... |
| | 3356 | 0.2 | 14.61 | 13.63 | 31.6 | 42.0 | ..... | ..... | ..... | ..... | ..... |
| | 3357 | −18.7 | 14.96 | 13.98 | 4.5 | 15.1 | 29.5 | ..... | ..... | ..... | ..... |
| | 3358 | −15.0 | 15.21 | 14.23 | 4.4 | 14.8 | 29.8 | ..... | ..... | ..... | ..... |
| | 3359 | −15.4 | 14.61 | 13.63 | 5.7 | 16.1 | ..... | ..... | ..... | ..... | ..... |
| | 3360 | −29.8 | 14.48 | 13.50 | 19.7 | 30.0 | ..... | ..... | ..... | ..... | ..... |
| | 3361 | 7.4 | 14.95 | 13.97 | −49.5 | −38.7 | −24.7 | −11.0 | ..... | ..... | ..... |
| | 3362 | − 5.9 | 14.69 | 13.71 | −48.2 | −37.7 | −23.1 | −10.7 | ..... | ..... | ..... |
| 2987 | 3363 | −13.3 | 14.59 | 13.61 | − 8.9 | 4.7 | 18.1 | ..... | ..... | ..... | ..... |
| Aug. 27, '08 | 3364 | − 7.9 | 14.09 | 13.11 | −45.1 | −31.3 | −19.1 | ..... | ..... | ..... | ..... |
| $9^h33^m.5$ | 3361′ | −13.0 | 13.94 | 12.96 | −44.7 | −31.1 | −19.0 | ..... | ..... | ..... | ..... |
| | 3362′ | 5.3 | 14.74 | 13.76 | 1.3 | 14.9 | 29.0 | ..... | ..... | ..... | ..... |
| | 3363′ | −13.8 | 14.54 | 13.56 | −10.8 | 3.0 | 16.1 | ..... | ..... | ..... | ..... |
| | 3364′ | 2.3 | 15.80 | 14.82 | −47.3 | −32.1 | ..... | ..... | ..... | ..... | ..... |
| 2999 | 3343′ | −17.1 | 14.23 | 13.25 | −38.5 | −25.8 | ..... | ..... | ..... | ..... | ..... |
| Aug. 28, '08 | 3344′ | −23.0 | 14.13 | 13.15 | −28.5 | −15.9 | ..... | ..... | ..... | ..... | ..... |
| $10^h10^m.2$ | 3345′ | −19.3 | 14.03 | 13.05 | −38.4 | −25.9 | ..... | ..... | ..... | ..... | ..... |
| | 3346′ | −19.3 | 13.61 | 12.63 | −34.0 | −21.9 | ..... | ..... | ..... | ..... | ..... |
| | 3347′ | −15.1 | 13.92 | 12.94 | −31.3 | −18.9 | ..... | ..... | ..... | ..... | ..... |
| | 3348′ | −13.4 | 13.50 | 12.52 | −32.1 | −20.1 | ..... | ..... | ..... | ..... | ..... |
| | 3349′ | −14.0 | 14.65 | 13.67 | −28.3 | −15.2 | ..... | ..... | ..... | ..... | ..... |
| | 3350′ | −10.1 | 13.71 | 12.73 | −26.0 | −13.8 | ..... | ..... | ..... | ..... | ..... |
| | 3351′ | 13.7 | 13.92 | 12.94 | −45.9 | −33.5 | ..... | ..... | ..... | ..... | ..... |
| | 3352′ | 0.9 | 13.92 | 12.94 | −41.6 | −29.2 | ..... | ..... | ..... | ..... | ..... |
| | 3353′ | 4.0 | 13.61 | 12.63 | −38.1 | −26.0 | ..... | ..... | ..... | ..... | ..... |
| | 3354′ | 9.1 | 14.65 | 13.67 | −26.3 | −13.2 | ..... | ..... | ..... | ..... | ..... |
| | 3355′ | −19.4 | 14.13 | 13.15 | 25.6 | 38.2 | ..... | ..... | ..... | ..... | ..... |
| | 3356′ | 16.5 | 14.44 | 13.46 | − 1.8 | 11.1 | ..... | ..... | ..... | ..... | ..... |
| | 3357′ | 16.5 | 13.40 | 12.42 | 5.7 | 17.6 | ..... | ..... | ..... | ..... | ..... |
| | 3358′ | 13.8 | 13.82 | 12.84 | 1.4 | 13.7 | ..... | ..... | ..... | ..... | ..... |
| | 3359′ | 10.0 | 14.65 | 13.67 | 0.3 | 13.4 | ..... | ..... | ..... | ..... | ..... |
| | 3360′ | 9.3 | 14.34 | 13.36 | 2.2 | 15.0 | ..... | ..... | ..... | ..... | ..... |
| 3005 | 3369 | 13.6 | 14.29 | 13.31 | −24.1 | ..... | 4.0 | 15.2 | 30°.0 | 43°.0 | ..... |
| Aug. 29, '08 | 3370 | 7.0 | 14.29 | 13.31 | −36.3 | ..... | − 9.7 | 3.7 | 18.0 | 30.8 | 44°.2 |
| $9^h10^m.0$ | 3382 | −11.4 | 14.44 | 13.46 | −32.2 | ..... | − 5.2 | 8.3 | 22.1 | ..... | ..... |
| 3013 | 3365 | − 5.8 | 14.07 | 13.09 | 18.0 | 31.3 | 44.5 | ..... | ..... | ..... | ..... |
| Aug. 31, '08 | 3366 | 11.2 | 14.32 | 13.34 | 13.9 | 27.2 | 40.9 | ..... | ..... | ..... | ..... |
| $9^h28^m.7$ | 3367 | 11.8 | 15.41 | 14.43 | 8.5 | 22.7 | 37.7 | ..... | ..... | ..... | ..... |
| | 3368 | 12.9 | 14.52 | 13.54 | 5.9 | 19.8 | 33.3 | ..... | ..... | ..... | ..... |
| | 3371 | 1.8 | 14.96 | 13.98 | − 2.8 | 11.0 | 25.5 | ..... | ..... | ..... | ..... |
| | 3372 | 1.8 | 14.67 | 13.69 | − 0.3 | 13.2 | 27.4 | ..... | ..... | ..... | ..... |
| | 3373 | 0.8 | 14.28 | 13.30 | 2.6 | 15.8 | ..... | ..... | ..... | ..... | ..... |

TABLE I—*Continued*

| Plate Number and Date | Number | Latitude | Diurnal Motion | | Longitudes on Days of Observation | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sidereal | Synodic | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 3013 (*cont.*) | 3374 | 3°.1 | 15°.08 | 14°.10 | 5°.9 | 19°.9 | ..... | ..... | ..... | ..... | ..... |
| | 3375 | 0.1 | 14.76 | 13.78 | 9.0 | 23.2 | 36°.9 | ..... | ..... | ..... | ..... |
| | 3376 | − 4.0 | 14.55 | 13.57 | 10.9 | 24.7 | 38.3 | ..... | ..... | ..... | ..... |
| | 3377 | − 6.9 | 14.72 | 13.74 | 7.9 | 21.5 | 35.7 | ..... | ..... | ..... | ..... |
| | 3378 | −10.0 | 14.17 | 13.19 | 8.1 | 21.2 | 34.8 | ..... | ..... | ..... | ..... |
| | 3379 | −18.5 | 15.21 | 14.23 | 7.8 | 21.7 | 36.6 | ..... | ..... | ..... | ..... |
| | 3380 | −17.0 | 13.97 | 12.99 | 7.1 | 20.0 | ..... | ..... | ..... | ..... | ..... |
| | 3381 | −14.8 | 14.47 | 13.49 | 3.4 | 16.8 | 30.7 | ..... | ..... | ..... | ..... |
| | 3383 | −11.1 | 14.67 | 13.69 | − 3.1 | 10.5 | 24.9 | 37°.9 | ..... | ..... | ..... |
| | 3384 | −12.5 | 14.72 | 13.74 | − 5.6 | 7.9 | 22.2 | ..... | ..... | ..... | ..... |
| | 3385 | −13.3 | 14.57 | 13.59 | − 8.3 | 5.0 | 19.2 | ..... | ..... | ..... | ..... |
| | 3386 | −18.3 | 14.88 | 13.90 | − 4.8 | 9.0 | ..... | ..... | ..... | ..... | ..... |
| | 3387 | −21.7 | 14.61 | 13.63 | − 5.0 | 9.0 | 22.8 | 36.0 | ..... | ..... | ..... |
| | 3388 | −21.0 | 14.71 | 13.73 | − 9.8 | 4.2 | 18.1 | 31.5 | ..... | ..... | ..... |
| | 3389 | −12.5 | 13.98 | 13.00 | −21.3 | − 8.7 | 5.1 | 17.5 | 31°.5 | ..... | ..... |
| | 3390 | −10.5 | 13.27 | 12.29 | −31.8 | −19.6 | ..... | ..... | ..... | ..... | ..... |
| | 3391 | − 8.6 | 14.37 | 13.39 | −37.6 | −24.7 | −10.5 | ..... | ..... | ..... | ..... |
| | 3392 | − 7.6 | 14.47 | 13.49 | −40.9 | −27.8 | −13.6 | ..... | ..... | ..... | ..... |
| | 3393 | 20.9 | 14.02 | 13.04 | −12.0 | 1.2 | 14.5 | 27.5 | 41.0 | ..... | ..... |
| | 3394 | 16.2 | 14.50 | 13.52 | −14.6 | − 0.9 | 12.7 | 26.1 | ..... | ..... | ..... |
| | 3395 | 18.7 | 14.34 | 13.36 | −17.1 | − 4.0 | 9.8 | 23.0 | ..... | ..... | ..... |
| | 3396 | 18.6 | 14.68 | 13.70 | −22.2 | − 8.6 | ..... | ..... | ..... | ..... | ..... |
| | 3397 | 18.9 | 14.29 | 13.31 | −29.3 | −15.3 | − 1.2 | 10.9 | 25.0 | 38°.3 | ..... |
| | 3398 | 14.6 | 14.56 | 13.58 | −26.2 | −13.0 | 1.0 | 14.7 | 28.8 | ..... | ..... |
| | 3399 | 12.2 | 14.88 | 13.90 | −33.0 | −19.2 | ..... | ..... | ..... | ..... | ..... |
| | 3400 | 8.9 | 14.76 | 13.78 | −25.9 | −12.5 | 2.0 | 15.2 | 30.1 | ..... | ..... |
| | 3401 | 9.2 | 14.78 | 13.80 | −22.9 | − 9.5 | 4.8 | 18.5 | ..... | ..... | ..... |
| | 3402 | 6.2 | 14.78 | 13.80 | −24.4 | −10.7 | .. 3.5 | 16.9 | 31.4 | 45.3 | ..... |
| 3025 | 3403 | 9.8 | 15.34 | 14.36 | 28.8 | 43.6 | ..... | ..... | ..... | ..... | ..... |
| Sept. 1, '08 | 3404 | 9.1 | 14.32 | 13.34 | 8.9 | 22.9 | 35.7 | ..... | ..... | ..... | ..... |
| $9^h18^m.4$ | 3405 | 5.3 | 14.71 | 13.73 | 6.0 | 19.9 | 33.6 | ..... | ..... | ..... | ..... |
| | 3406 | 1.8 | 14.72 | 13.74 | 6.3 | 20.9 | 33.9 | ..... | ..... | ..... | ..... |
| | 3407 | 2.2 | 15.43 | 14.45 | 15.3 | 30.2 | ..... | ..... | ..... | ..... | ..... |
| | 3408 | −10.0 | 13.92 | 12.94 | 14.9 | 28.9 | 42.9 | ..... | ..... | ..... | ..... |
| | 3409 | −12.6 | 14.27 | 13.29 | 22.1 | 35.8 | ..... | ..... | ..... | ..... | ..... |
| | 3410 | −13.8 | 15.24 | 14.26 | 21.9 | 36.6 | ..... | ..... | ..... | ..... | ..... |
| | 3411 | −16.4 | 15.14 | 14.16 | 22.4 | 37.0 | ..... | ..... | ..... | ..... | ..... |
| | 3412 | −19.7 | 15.24 | 14.26 | 20.0 | 34.7 | ..... | ..... | ..... | ..... | ..... |
| | 3413 | −25.1 | 14.85 | 13.87 | 16.7 | 31.0 | ..... | ..... | ..... | ..... | ..... |
| | 3414 | −15.2 | 14.17 | 13.19 | − 1.0 | 12.6 | ..... | ..... | ..... | ..... | ..... |
| | 3415 | 16.7 | 14.38 | 13.40 | 1.9 | 15.0 | 29.0 | 42.8 | ..... | ..... | ..... |
| | 3416 | 21.1 | 14.09 | 13.11 | 5.6 | 19.7 | 32.5 | 45.9 | ..... | ..... | ..... |
| | 3417 | 16.9 | 15.24 | 14.26 | − 4.8 | 9.9 | ..... | ..... | ..... | ..... | ..... |
| | 3418 | − 2.9 | 14.68 | 13.70 | −26.0 | −11.9 | 1.8 | 16.0 | ..... | ..... | ..... |
| | 3419 | − 8.9 | 14.56 | 13.58 | −27.5 | −13.5 | ..... | ..... | ..... | ..... | ..... |
| | 3420 | −10.8 | 14.69 | 13.71 | −29.9 | −15.8 | − 2.2 | 11.9 | 25.7 | ..... | ..... |
| | 3421 | −11.5 | 15.05 | 14.07 | −31.7 | −17.2 | ..... | ..... | ..... | ..... | ..... |
| 3033 | 3422 | − 7.6 | 15.08 | 14.10 | − 3.7 | 10.1 | ..... | ..... | ..... | ..... | ..... |
| Sept. 2, '08 | 3423 | −10.9 | 14.41 | 13.43 | −18.9 | − 5.0 | 8.6 | 21.8 | ..... | ..... | ..... |
| $10^h02^m.8$ | 3424 | 0.2 | 13.96 | 12.98 | − 8.6 | − 4.1 | ..... | ..... | ..... | ..... | ..... |
| | 3425 | 18.1 | 14.16 | 13.18 | −33.0 | −20.1 | ..... | ..... | ..... | ..... | ..... |
| | 3426 | 1.7 | 13.34 | 12.36 | 23.1 | 35.2 | ..... | ..... | ..... | ..... | ..... |
| | 3427 | −21.6 | 14.67 | 13.69 | 30.1 | 43.5 | ..... | ..... | ..... | ..... | ..... |
| | 3428 | −12.5 | 14.88 | 13.90 | 9.1 | 22.7 | ..... | ..... | ..... | ..... | ..... |
| | 3429 | −21.6 | 14.59 | 13.61 | 13.1 | 26.5 | 40.8 | ..... | ..... | ..... | ..... |
| | 3430 | −14.1 | 14.54 | 13.56 | 7.9 | 21.1 | 35.7 | ..... | ..... | ..... | ..... |
| | 3431 | 10.2 | 14.06 | 13.08 | 19.9 | 32.7 | ..... | ..... | ..... | ..... | ..... |
| | 3432 | 12.6 | 14.10 | 13.12 | 19.0 | 32.0 | 45.8 | ..... | ..... | ..... | ..... |
| | 3433 | − 6.0 | 14.37 | 13.39 | −18.7 | − 5.9 | 8.2 | 21.7 | ..... | ..... | ..... |
| | 3434 | 18.4 | 14.44 | 13.46 | − 6.2 | 6.4 | 20.9 | 34.3 | ..... | ..... | ..... |
| 3039 | 3436 | 17.0 | 14.33 | 13.35 | 27.0 | 41.2 | ..... | ..... | ..... | ..... | ..... |
| Sept. 3, '08 | 3437 | 23.5 | 14.33 | 13.35 | 20.0 | 34.2 | ..... | ..... | ..... | ..... | ..... |
| $9^h32^m.2$ | 3438 | 10.6 | 14.33 | 13.35 | 13.4 | 27.6 | ..... | ..... | ..... | ..... | ..... |
| | 3439 | 15.1 | 13.76 | 12.78 | 5.0 | 18.7 | 31.0 | ..... | ..... | ..... | ..... |
| | 3440 | 16.6 | 14.49 | 13.51 | 8.6 | 22.9 | 36.1 | ..... | ..... | ..... | ..... |
| | 3441 | 10.5 | 14.33 | 13.35 | 10.6 | 23.9 | 37.8 | ..... | ..... | ..... | ..... |
| | 3442 | 17.9 | 14.49 | 13.51 | 9.9 | 24.0 | 37.4 | ..... | ..... | ..... | ..... |

TABLE I—*Continued*

| Plate Number and Date | Number | Latitude | Diurnal Motion | | Longitudes on Days of Observation | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sidereal | Synodic | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 3044 | 3443 | 8°.2 | 14°.98 | 14°.00 | 29°.9 | 43°.5 | ..... | ..... | ..... | ..... | ..... |
| Sept. 4, '08 | 3445 | 14.6 | 14.37 | 13.39 | 20.8 | 33.8 | ..... | ..... | ..... | ..... | ..... |
| 11h03m9 | 3446 | − 4.1 | 14.16 | 13.18 | 22.0 | 34.8 | ..... | ..... | ..... | ..... | ..... |
| | 3447 | 4.2 | 14.88 | 13.90 | 8.5 | 22.0 | ..... | ..... | ..... | ..... | ..... |
| | 3448 | − 0.5 | 13.95 | 12.97 | 8.9 | 21.5 | ..... | ..... | ..... | ..... | ..... |
| | 3449 | − 2.3 | 14.37 | 13.39 | 9.9 | 22.9 | ..... | ..... | ..... | ..... | ..... |
| | 3450 | − 8.1 | 14.47 | 13.49 | 14.0 | 27.1 | ..... | ..... | ..... | ..... | ..... |
| | 3451 | − 9.0 | 14.26 | 13.28 | 12.5 | 25.4 | ..... | ..... | ..... | ..... | ..... |
| | 3453 | − 6.4 | 14.47 | 13.49 | 16.3 | 29.4 | ..... | ..... | ..... | ..... | ..... |
| | 3455 | 15.4 | 14.67 | 13.69 | 26.1 | 39.4 | ..... | ..... | ..... | ..... | ..... |
| 3048 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Sept. 5, '08 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 10h22m4 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 3058 | 3457 | 7.1 | 14.38 | 13.40 | 2.0 | 15.6 | 28°.2 | ..... | ..... | ..... | ..... |
| Sept. 8, '08 | 3458 | 9.9 | 14.71 | 13.73 | 1.3 | 15.0 | 28.2 | 41°.2 | ..... | ..... | ..... |
| 10h48m2 | 3459 | 8.8 | 14.53 | 13.55 | − 0.8 | 12.9 | 25.7 | ..... | ..... | ..... | ..... |
| | 3460 | 8.2 | 14.61 | 13.63 | − 4.1 | 8.3 | 21.8 | 35.4 | ..... | ..... | ..... |
| | 3461 | −13.3 | 14.78 | 13.80 | 3.1 | 17.0 | 30.1 | ..... | ..... | ..... | ..... |
| | 3462 | − 8.8 | 14.59 | 13.61 | − 0.6 | 13.9 | 26.0 | ..... | ..... | ..... | ..... |
| | 3463 | −12.2 | 14.60 | 13.62 | − 7.3 | 6.6 | 19.7 | 32.3 | ..... | ..... | ..... |
| | 3464 | −17.4 | 14.45 | 13.47 | − 7.3 | 6.0 | ..... | ..... | ..... | ..... | ..... |
| | 3465 | −16.4 | 14.17 | 13.19 | − 9.9 | 3.7 | 15.9 | ..... | ..... | ..... | ..... |
| | 3466 | −14.3 | 13.81 | 12.83 | −11.4 | 1.1 | 13.7 | ..... | ..... | ..... | ..... |
| | 3467 | −20.9 | 14.35 | 13.37 | − 8.9 | 4.3 | ..... | ..... | ..... | ..... | ..... |
| | 3468 | −20.3 | 14.12 | 13.14 | −10.9 | 2.6 | 14.8 | ..... | ..... | ..... | ..... |
| | 3469 | −11.7 | 14.85 | 13.87 | −14.9 | − 1.2 | ..... | ..... | ..... | ..... | ..... |
| | 3470 | − 7.3 | 14.86 | 13.88 | −12.0 | 2.2 | 15.5 | 28.5 | 43°.5 | ..... | ..... |
| | 3471 | − 4.1 | 14.58 | 13.60 | − 8.9 | 5.0 | 18.0 | 30.9 | 45.4 | ..... | ..... |
| | 3472 | − 2.0 | 14.58 | 13.60 | − 8.1 | 5.8 | 18.5 | ..... | ..... | ..... | ..... |
| | 3473 | − 2.9 | 14.47 | 13.49 | −14.8 | − 1.1 | 12.2 | 24.3 | ..... | ..... | ..... |
| | 3474 | 6.9 | 14.90 | 13.92 | −14.7 | − 0.9 | 12.9 | 25.8 | 40.8 | ..... | ..... |
| | 3475 | 18.2 | 14.73 | 13.75 | −19.3 | − 6.0 | 7.6 | ..... | ..... | ..... | ..... |
| | 3476 | 19.6 | 14.84 | 13.86 | −22.8 | − 8.9 | 4.7 | 17.8 | 32.4 | ..... | ..... |
| | 3477 | 11.1 | 14.53 | 13.55 | −24.1 | −10.6 | 2.4 | ..... | ..... | ..... | ..... |
| | 3478 | 11.6 | 14.17 | 13.19 | −25.4 | −12.2 | 0.4 | ..... | ..... | ..... | ..... |
| | 3479 | 11.2 | 14.24 | 13.26 | −27.0 | −13.9 | ..... | ..... | ..... | ..... | ..... |
| | 3480 | 13.1 | 14.46 | 14.48 | −29.3 | −15.0 | ..... | ..... | ..... | ..... | ..... |
| | 3481 | 15.5 | 14.79 | 13.81 | −33.0 | −19.0 | − 6.0 | ..... | ..... | ..... | ..... |
| | 3482 | 17.7 | 14.85 | 13.87 | −38.1 | −24.4 | ..... | ..... | ..... | ..... | ..... |
| 3062 | 3484 | − 2.7 | 14.71 | 13.73 | 0.7 | 14.0 | ..... | ..... | ..... | ..... | ..... |
| Sept. 9, '08 | 3485 | − 0.9 | 14.33 | 13.35 | 3.0 | 15.9 | 28.6 | ..... | ..... | ..... | ..... |
| 10h30m4 | 3486 | 1.3 | 14.49 | 13.51 | 2.8 | 15.9 | 28.7 | ..... | ..... | ..... | ..... |
| | 3487 | − 5.0 | 14.74 | 13.76 | 3.1 | 16.3 | 29.9 | 44.2 | ..... | ..... | ..... |
| | 3488 | −14.1 | 14.38 | 13.40 | −35.0 | −22.2 | − 9.3 | ..... | ..... | ..... | ..... |
| | 3489 | −10.1 | 14.91 | 13.93 | − 0.8 | 13.0 | 26.2 | 41.0 | ..... | ..... | ..... |
| | 3490 | 19.2 | 13.82 | 12.84 | −12.4 | 0.0 | 12.2 | 26.1 | ..... | ..... | ..... |
| | 3491 | 19.0 | 14.41 | 13.43 | − 7.0 | 6.0 | ..... | ..... | ..... | ..... | ..... |
| 3070 | 3492 | 3.2 | 14.58 | 13.60 | 24.1 | 37.0 | ..... | ..... | ..... | ..... | ..... |
| Sept. 10, '08 | 3493 | 6.0 | 14.37 | 13.39 | 17.9 | 30.6 | ..... | ..... | ..... | ..... | ..... |
| 9h44m8 | 3494 | 2.6 | 14.68 | 13.70 | 17.5 | 30.5 | ..... | ..... | ..... | ..... | ..... |
| | 3495 | 3.3 | 14.26 | 13.28 | 13.0 | 25.6 | ..... | ..... | ..... | ..... | ..... |
| | 3496 | 7.0 | 14.47 | 13.49 | 15.5 | 28.3 | ..... | ..... | ..... | ..... | ..... |
| | 3497 | 9.6 | 13.31 | 12.33 | 31.3 | 43.0 | ..... | ..... | ..... | ..... | ..... |
| | 3498 | 11.1 | 14.68 | 13.70 | − 0.7 | 12.3 | ..... | ..... | ..... | ..... | ..... |
| | 3499 | 10.1 | 14.47 | 13.49 | − 1.2 | 11.6 | 26.2 | ..... | ..... | ..... | ..... |
| | 3500 | 11.5 | 14.22 | 13.24 | − 2.9 | 9.9 | 24.0 | ..... | ..... | ..... | ..... |
| | 3501 | 6.7 | 14.47 | 13.49 | 11.0 | 23.8 | ..... | ..... | ..... | ..... | ..... |
| | 3502 | −17.6 | 14.22 | 13.24 | −14.8 | − 2.0 | 12.1 | ..... | ..... | ..... | ..... |
| | 3503 | −19.3 | 15.21 | 14.23 | −16.8 | − 3.3 | ..... | ..... | ..... | ..... | ..... |
| | 3504 | −23.4 | 13.94 | 12.96 | −26.6 | −14.3 | ..... | ..... | ..... | ..... | ..... |
| | 3505 | −14.5 | 14.03 | 13.05 | −28.5 | −16.1 | − 2.0 | ..... | ..... | ..... | ..... |
| | 3506 | 15.7 | 13.88 | 12.90 | 8.9 | 21.0 | 35.1 | ..... | ..... | ..... | ..... |
| | 3507 | 15.7 | 14.81 | 13.83 | − 1.6 | 10.9 | 25.5 | ..... | ..... | ..... | ..... |

TABLE I—*Continued*

| Plate Number and Date | Number | Latitude | Diurnal Motion | | Longitudes on Days of Observation | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sidereal | Synodic | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 3083 | 3509 | − 2°.5 | 14°.75 | 13°.77 | 33°.3 | 48°.2 | ..... | ..... | ..... | ..... | ..... |
| Sept. 11, '08 | 3510 | 12.9 | 14.66 | 13.68 | 12.6 | 27.4 | ..... | ..... | ..... | ..... | ..... |
| $8^h31^m1$ | 3511 | −18.0 | 14.38 | 13.40 | 0.0 | 14.5 | ..... | ..... | ..... | ..... | ..... |
| | 3512 | −18.3 | 15.40 | 14.42 | −44.4 | −28.8 | ..... | ..... | ..... | ..... | ..... |
| | 3513 | −11.1 | 13.46 | 12.48 | −45.5 | −32.0 | ..... | ..... | ..... | ..... | ..... |
| 3090 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Sept. 12, '08 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| $10^h29^m4$ | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 3094 | 3514 | −10.7 | 14.70 | 13.72 | 1.1 | 15.2 | 29°.0 | ..... | ..... | ..... | ..... |
| Sept. 15, '08 | 3515 | −15.6 | 14.67 | 13.69 | − 1.2 | 13.3 | 26.8 | 39°.8 | ..... | ..... | ..... |
| $9^h41^m2$ | 3516 | −18.9 | 14.79 | 13.81 | − 1.8 | 12.8 | ..... | ..... | ..... | ..... | ..... |
| | 3517 | −21.0 | 14.22 | 13.24 | − 1.5 | 12.5 | ..... | ..... | ..... | ..... | ..... |
| | 3518 | −19.3 | 14.21 | 13.23 | − 3.2 | 10.8 | 23.7 | ..... | ..... | ..... | ..... |
| | 3519 | −21.1 | 14.01 | 13.03 | − 3.4 | 10.3 | 23.1 | ..... | ..... | ..... | ..... |
| | 3520 | −20.4 | 14.44 | 13.46 | − 6.0 | 8.2 | 21.3 | 34.4 | ..... | ..... | ..... |
| | 3521 | −22.3 | 14.08 | 13.10 | − 7.3 | 7.4 | 19.8 | 32.1 | ..... | ..... | ..... |
| | 3522 | −20.1 | 13.94 | 12.96 | −10.7 | 3.0 | ..... | ..... | ..... | ..... | ..... |
| | 3523 | −25.7 | 14.22 | 13.24 | −13.0 | 1.0 | ..... | ..... | ..... | ..... | ..... |
| | 3524 | −13.8 | 14.98 | 14.00 | − 9.5 | 5.3 | ..... | ..... | ..... | ..... | ..... |
| | 3525 | −10.9 | 15.35 | 14.37 | 12.5 | 27.7 | ..... | ..... | ..... | ..... | ..... |
| | 3526 | −11.2 | 14.65 | 13.67 | 9.9 | 24.3 | 37.7 | ..... | ..... | ..... | ..... |
| | 3527 | −15.4 | 14.69 | 13.71 | −10.3 | 4.1 | 17.1 | 31.2 | 44°.8 | ..... | ..... |
| | 3528 | − 0.2 | 14.76 | 13.78 | −12.3 | 2.5 | 15.7 | ..... | ..... | ..... | ..... |
| | 3529 | − 0.7 | 14.48 | 13.50 | −16.9 | − 2.5 | 10.8 | 23.5 | 37.7 | ..... | ..... |
| | 3530 | 4.6 | 14.51 | 13.53 | −16.5 | − 2.6 | 10.9 | 24.0 | ..... | ..... | ..... |
| | 3531 | 4.6 | 14.21 | 13.23 | − 2.2 | 11.8 | 24.7 | ..... | ..... | ..... | ..... |
| | 3532 | − 9.2 | 14.34 | 13.36 | −40.1 | −25.7 | −12.2 | − 0.2 | ..... | ..... | ..... |
| | 3533 | −23.2 | 14.79 | 13.81 | −11.7 | 2.9 | ..... | ..... | ..... | ..... | ..... |
| | 3534 | 21.3 | 13.84 | 12.86 | − 5.9 | 7.7 | ..... | ..... | ..... | ..... | ..... |
| 3100 | 3535 | − 9.9 | 15.35 | 14.37 | 17.5 | 31.4 | 45.4 | ..... | ..... | ..... | ..... |
| Sept. 16, '08 | 3536 | − 7.8 | 14.62 | 13.64 | 19.5 | 32.8 | ..... | ..... | ..... | ..... | ..... |
| $11^h04^m$ | 3537 | − 7.6 | 14.51 | 13.53 | 21.0 | 34.2 | ..... | ..... | ..... | ..... | ..... |
| | 3538 | −14.6 | 14.82 | 13.84 | 17.4 | 30.8 | ..... | ..... | ..... | ..... | ..... |
| | 3539 | −12.9 | 14.26 | 13.28 | 4.4 | 17.2 | 30.2 | ..... | ..... | ..... | ..... |
| | 3540 | − 8.0 | 14.50 | 13.52 | 0.9 | 14.0 | 27.2 | 41.1 | ..... | ..... | ..... |
| | 3541 | 0.0 | 14.82 | 13.84 | − 3.9 | 9.6 | ..... | ..... | ..... | ..... | ..... |
| | 3542 | 3.8 | 15.14 | 14.16 | − 8.9 | 6.0 | 18.6 | ..... | ..... | ..... | ..... |
| | 3543 | −18.1 | 14.21 | 13.23 | 12.1 | 25.0 | ..... | ..... | ..... | ..... | ..... |
| | 3544 | −20.3 | 13.39 | 12.41 | 14.7 | 27.7 | 38.8 | ..... | ..... | ..... | ..... |
| | 3545 | −21.9 | 14.93 | 13.95 | 19.6 | 32.9 | 46.7 | ..... | ..... | ..... | ..... |
| | 3546 | − 3.1 | 14.92 | 13.94 | 7.3 | 6.3 | ..... | ..... | ..... | ..... | ..... |
| | 3547 | − 7.1 | 14.32 | 13.34 | −26.5 | −13.8 | − 0.6 | ..... | ..... | ..... | ..... |
| | 3548 | −20.5 | 14.17 | 13.19 | −33.0 | −20.1 | − 7.4 | 6.0 | ..... | 32°.5 | ..... |
| | 3549 | −20.3 | 14.00 | 13.02 | −40.7 | −28.0 | ..... | ..... | ..... | ..... | ..... |
| | 3550 | 15.3 | 14.34 | 13.36 | − 6.0 | 7.1 | 19.9 | 33.8 | ..... | ..... | ..... |
| | 3551 | − 3.4 | 13.80 | 12.82 | 3.2 | 15.7 | ..... | ..... | ..... | ..... | ..... |
| | 3552 | − 0.6 | 14.62 | 13.64 | − 0.3 | 13.0 | ..... | ..... | ..... | ..... | ..... |
| 3104 | 3553′ | −11.7 | 14.74 | 13.76 | 28.0 | 41.3 | ..... | ..... | ..... | ..... | ..... |
| Sept. 17, '08 | 3554 | − 5.5 | 14.94 | 13.96 | 18.0 | 31.5 | ..... | ..... | ..... | ..... | ..... |
| $10^h28^m6$ | 3555 | −20.2 | 14.12 | 13.14 | 15.6 | 28.3 | ..... | ..... | ..... | ..... | ..... |
| | 3556 | − 5.3 | 14.47 | 13.49 | −37.9 | −25.0 | −11.1 | ..... | 15.8 | ..... | ..... |
| | 3557 | 4.8 | 14.15 | 13.17 | −29.3 | −16.7 | − 3.8 | ..... | 23.2 | ..... | ..... |
| | 3558 | − 4.5 | 14.84 | 13.86 | −33.0 | −19.6 | ..... | ..... | ..... | ..... | ..... |
| | 3553 | −17.0 | 14.32 | 13.34 | 16.5 | 29.4 | ..... | ..... | ..... | ..... | ..... |
| 3109 | 3559 | 1.1 | 14.60 | 13.62 | 26.9 | 41.0 | ..... | ..... | ..... | ..... | ..... |
| Sept. 18, '08 | 3560 | − 2.1 | 14.12 | 13.14 | 29.8 | 43.4 | ..... | ..... | ..... | ..... | ..... |
| $9^h40^m6$ | 3561 | − 9.7 | 14.12 | 13.14 | 19.3 | 32.9 | ..... | ..... | ..... | ..... | ..... |
| | 3562 | 20.8 | 13.63 | 12.65 | 30.9 | 44.0 | ..... | ..... | ..... | ..... | ..... |
| | 3563 | 7.9 | 14.50 | 13.52 | −17.7 | − 3.7 | ..... | ..... | ..... | ..... | ..... |
| | 3564 | 5.8 | 14.43 | 13.45 | −22.0 | − 7.9 | ..... | 18.6 | ..... | ..... | ..... |
| | 3565 | 4.1 | 14.50 | 13.52 | −25.0 | −11.4 | ..... | 15.7 | ..... | ..... | ..... |
| | 3566 | 5.8 | 14.41 | 13.43 | −27.4 | −13.5 | ..... | ..... | ..... | ..... | ..... |
| | 3567 | 10.4 | 14.12 | 13.14 | −29.6 | −16.0 | ..... | ..... | ..... | ..... | ..... |

TABLE I—*Continued*

| Plate Number and Date | Number | Latitude | Diurnal Motion | | Longitudes on Days of Observation | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sidereal | Synodic | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 3109 (*cont.*) | 3568 | 12°.4 | 13°.83 | 12°.85 | −25°.8 | −12°.5 | ..... | ..... | ..... | ..... | ..... |
| | 3569 | 8.3 | 14.12 | 13.14 | −19.7 | − 6.1 | ..... | ..... | ..... | ..... | ..... |
| | 3570 | − 7.6 | 14.09 | 13.11 | −21.1 | − 7.2 | ..... | 18°.5 | ..... | ..... | ..... |
| | 3571 | −19.1 | 14.31 | 13.33 | −15.3 | − 1.5 | ..... | ..... | ..... | ..... | ..... |
| | 3572 | − 8.0 | 14.79 | 13.81 | −32.5 | −18.2 | ..... | ..... | ..... | ..... | ..... |
| | 3573 | −11.8 | 14.79 | 13.81 | − 7.7 | 6.6 | ..... | ..... | ..... | ..... | ..... |
| 3113 | 3574 | − 8.9 | 15.53 | 14.54 | −18.5 | ..... | 10°.3 | ..... | ..... | ..... | ..... |
| Sept. 19, '08 | 3575 | −14.8 | 14.57 | 13.58 | −12.2 | ..... | 14.7 | ..... | ..... | ..... | ..... |
| $10^h31^m.5$ | 3576 | −14.1 | 14.62 | 13.63 | −37.1 | ..... | −10.1 | ..... | ..... | ..... | ..... |
| | 3577 | −17.2 | 13.86 | 12.87 | −41.3 | ..... | −15.8 | ..... | ..... | ..... | ..... |
| | 3578 | 11.8 | 14.11 | 13.12 | − 8.0 | ..... | 18.0 | ..... | ..... | ..... | ..... |
| 3117 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Sept. 21, '08 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| $10^h04^m.6$ | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 3121 | 3579 | 18.5 | 13.58 | 12.59 | 16.0 | 28.5 | ..... | ..... | ..... | ..... | ..... |
| Sept. 25, '08 | 3580 | 16.5 | 14.28 | 13.29 | 13.9 | 27.1 | ..... | ..... | ..... | ..... | ..... |
| $10^h28^m.4$ | 3581 | 13.2 | 13.98 | 12.99 | 14.5 | 27.4 | ..... | ..... | ..... | ..... | ..... |
| | 3582 | 13.6 | 14.18 | 13.19 | 11.9 | 25.0 | ..... | ..... | ..... | ..... | ..... |
| | 3583 | 12.0 | 14.89 | 13.90 | 9.2 | 23.0 | ..... | ..... | ..... | ..... | ..... |
| | 3584 | 12.8 | 14.08 | 13.09 | − 0.2 | 12.8 | ..... | ..... | ..... | ..... | ..... |
| | 3585 | 10.0 | 15.29 | 14.30 | − 1.1 | 13.1 | ..... | ..... | ..... | ..... | ..... |
| | 3586 | 2.5 | 14.89 | 13.90 | − 3.9 | 9.9 | ..... | ..... | ..... | ..... | ..... |
| | 3587 | 10.6 | 14.08 | 13.09 | − 5.5 | 7.5 | ..... | ..... | ..... | ..... | ..... |
| | 3588 | 12.1 | 13.88 | 12.89 | − 6.1 | 6.7 | ..... | ..... | ..... | ..... | ..... |
| | 3589 | −19.4 | 14.38 | 13.39 | −17.9 | − 4.6 | ..... | ..... | ..... | ..... | ..... |
| | 3590 | −11.0 | 14.48 | 13.49 | −17.6 | − 4.2 | ..... | ..... | ..... | ..... | ..... |
| | 3591 | −23.7 | 13.48 | 12.49 | −24.5 | −12.1 | ..... | ..... | ..... | ..... | ..... |
| | 3592 | − 0.3 | 14.99 | 14.00 | −10.7 | 3.2 | ..... | ..... | ..... | ..... | ..... |
| | 3593 | −18.5 | 14.08 | 13.09 | −27.0 | −14.0 | ..... | ..... | ..... | ..... | ..... |
| | 3594 | 3.5 | 14.48 | 13.49 | −10.1 | 3.3 | ..... | ..... | ..... | ..... | ..... |
| | 3595 | 13.9 | 15.09 | 14.10 | − 9.5 | 4.5 | ..... | ..... | ..... | ..... | ..... |
| | 3596 | 16.8 | 13.88 | 12.89 | −18.2 | − 5.4 | ..... | ..... | ..... | ..... | ..... |
| | 3597 | 21.7 | 13.88 | 12.89 | −14.0 | − 1.2 | ..... | ..... | ..... | ..... | ..... |
| | 3598 | 15.2 | 13.88 | 12.89 | −13.8 | − 1.0 | ..... | ..... | ..... | ..... | ..... |
| | 3599 | 13.2 | 14.18 | 13.19 | −20.1 | − 7.0 | ..... | ..... | ..... | ..... | ..... |
| | 3600 | 4.5 | 14.48 | 13.49 | −21.0 | − 7.6 | ..... | ..... | ..... | ..... | ..... |
| | 3601 | 3.1 | 14.58 | 13.59 | −24.5 | −11.0 | ..... | ..... | ..... | ..... | ..... |
| | 3602 | 9.8 | 13.98 | 12.99 | −23.1 | −10.2 | ..... | ..... | ..... | ..... | ..... |
| | 3603 | 12.7 | 14.68 | 13.69 | −26.2 | −12.6 | ..... | ..... | ..... | ..... | ..... |
| | 3604 | 21.1 | 13.98 | 12.99 | −32.2 | −19.3 | ..... | ..... | ..... | ..... | ..... |
| | 3605 | 9.8 | 14.18 | 13.19 | −31.0 | −17.9 | ..... | ..... | ..... | ..... | ..... |
| | 3606 | 13.1 | 15.09 | 14.10 | −31.0 | −17.0 | ..... | ..... | ..... | ..... | ..... |
| | 3607 | 4.1 | 14.28 | 13.29 | −30.0 | −16.8 | ..... | ..... | ..... | ..... | ..... |
| | 3608 | − 5.4 | 14.18 | 13.19 | −20.7 | − 7.6 | ..... | ..... | ..... | ..... | ..... |
| | 3609 | − 0.9 | 14.58 | 13.59 | −29.8 | −16.3 | ..... | ..... | ..... | ..... | ..... |
| | 3610 | 16.5 | 14.38 | 13.39 | 8.3 | 21.6 | ..... | ..... | ..... | ..... | ..... |
| 3124 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Sept. 26, '08 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| $10^h18^m.5$ | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 3128 | 3611 | 9.2 | 14.35 | 13.36 | 34.2 | 47.8 | ..... | ..... | ..... | ..... | ..... |
| Sept. 29, '08 | 3612 | 13.1 | 13.86 | 12.87 | 29.8 | 42.9 | ..... | ..... | ..... | ..... | ..... |
| $9^h11^m.4$ | 3613 | 14.4 | 14.06 | 13.07 | 33.3 | 46.6 | ..... | ..... | ..... | ..... | ..... |
| | 3614 | 17.7 | 14.35 | 13.36 | 32.1 | 45.7 | ..... | ..... | ..... | ..... | ..... |
| | 3615 | 12.4 | 14.06 | 13.07 | 26.5 | 39.8 | ..... | ..... | ..... | ..... | ..... |
| | 3616 | 13.5 | 14.75 | 13.76 | 23.9 | 37.9 | ..... | ..... | ..... | ..... | ..... |
| | 3617 | 10.8 | 14.16 | 13.17 | 21.2 | 34.6 | ..... | ..... | ..... | ..... | ..... |
| | 3618 | 4.6 | 14.25 | 13.26 | 21.9 | 35.4 | ..... | ..... | ..... | ..... | ..... |
| | 3619 | 6.9 | 14.75 | 13.76 | 23.5 | 37.5 | ..... | ..... | ..... | ..... | ..... |
| | 3620 | 1.4 | 14.35 | 13.36 | 33.0 | 46.6 | ..... | ..... | ..... | ..... | ..... |
| | 3621 | 3.7 | 13.76 | 12.77 | 31.7 | 44.7 | ..... | ..... | ..... | ..... | ..... |
| | 3623 | − 1.0 | 14.55 | 13.56 | 22.2 | 36.0 | ..... | ..... | ..... | ..... | ..... |

TABLE I—*Continued*

| Plate Number and Date | Number | Latitude | Diurnal Motion | | Longitudes on Days of Observation | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sidereal | Synodic | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 3128 (*cont.*) | 3624 | 9°.5 | 13°.57 | 12°.58 | 9°.4 | 22°.2 | ..... | ..... | ..... | ..... | ..... |
| | 3625 | −17.3 | 14.45 | 13.46 | 26.3 | 40.0 | ..... | ..... | ..... | ..... | ..... |
| | 3626 | −16.3 | 14.16 | 13.17 | 24.8 | 38.2 | ..... | ..... | ..... | ..... | ..... |
| | 3627 | −21.6 | 15.04 | 14.05 | 15.1 | 29.4 | ..... | ..... | ..... | ..... | ..... |
| | 3628 | −24.7 | 13.27 | 12.28 | 5.5 | 18.0 | ..... | ..... | ..... | ..... | ..... |
| | 3629 | − 7.8 | 14.16 | 13.17 | −12.1 | 1.3 | ..... | ..... | ..... | ..... | ..... |
| | 3630 | − 8.6 | 14.35 | 13.36 | −10.6 | 3.0 | ..... | ..... | ..... | ..... | ..... |
| | 3631 | −14.8 | 15.33 | 14.34 | −17.1 | − 2.5 | ..... | ..... | ..... | ..... | ..... |
| | 3632 | 6.8 | 14.71 | 13.72 | −10.0 | 3.2 | ..... | 31°.1 | ..... | ..... | ..... |
| | 3633 | 8.2 | 14.53 | 13.54 | −12.2 | 1.1 | ..... | 28.2 | 42°.1 | ..... | ..... |
| | 3634 | 18.4 | 14.54 | 13.55 | − 1.8 | 11.9 | ..... | 38.9 | ..... | ..... | ..... |
| | 3635 | 11.2 | 13.66 | 12.67 | 9.8 | 22.7 | ..... | ..... | ..... | ..... | ..... |
| | 3636 | 23.3 | 13.76 | 12.77 | 7.0 | 20.0 | ..... | ..... | ..... | ..... | ..... |
| 3132 | 3639 | −13.8 | 14.77 | 13.78 | − 3.0 | ..... | 24°.4 | ..... | ..... | ..... | ..... |
| Sept. 30, '08 | 3640 | −16.4 | 14.88 | 13.89 | −25.0 | ..... | 1.9 | 16.9 | ..... | ..... | ..... |
| 9h37m | 3641 | −14.7 | 14.71 | 13.72 | −40.0 | ..... | −11.4 | 1.2 | ..... | 28°.8 | ..... |
| | 3643 | −10.8 | 14.29 | 13.30 | −35.8 | ..... | − 9.2 | 4.5 | ..... | 30.6 | ..... |
| 3139 | 3646 | 2.4 | 14.96 | 13.97 | 29.3 | 43.5 | ..... | ..... | ..... | ..... | ..... |
| Oct. 2, '08 | 3648 | − 9.9 | 14.66 | 13.67 | 21.6 | 35.5 | ..... | ..... | ..... | ..... | ..... |
| 9h19m4 | 3649 | −22.2 | 13.87 | 12.88 | 17.0 | 30.1 | ..... | ..... | ..... | ..... | ..... |
| | 3652 | −13.0 | 14.46 | 13.47 | −17.0 | − 3.3 | ..... | ..... | ..... | ..... | ..... |
| | 3654 | −14.4 | 13.98 | 12.99 | −20.6 | − 7.3 | ..... | 18.5 | ..... | ..... | ..... |
| | 3655 | −13.6 | 14.35 | 13.36 | −23.3 | − 9.2 | ..... | 17.0 | ..... | ..... | ..... |
| | 3657 | − 7.9 | 13.97 | 12.98 | 28.7 | 41.9 | ..... | ..... | ..... | ..... | ..... |
| | 3658 | −16.8 | 14.96 | 13.97 | 21.0 | 35.2 | ..... | ..... | ..... | ..... | ..... |
| | 3659 | −14.4 | 14.66 | 13.67 | − 2.6 | 11.3 | ..... | ..... | ..... | ..... | ..... |
| | 3660 | −14.6 | 13.78 | 12.79 | − 5.7 | 7.3 | ..... | ..... | ..... | ..... | ..... |
| | 3661 | −17.5 | 14.46 | 13.47 | −23.8 | −10.1 | ..... | ..... | ..... | ..... | ..... |
| | 3662 | 6.5 | 13.09 | 12.10 | −38.6 | −26.3 | ..... | ..... | ..... | ..... | ..... |
| | 3663 | − 6.7 | 14.38 | 13.39 | −40.5 | −27.1 | ..... | − 0.9 | ..... | 27.5 | 40°.2 |
| 3147 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Oct. 3, '08 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 9h43m6 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 3151 | 3664 | 7.4 | 14.77 | 13.78 | − 0.7 | ..... | 28.0 | 40.9 | ..... | ..... | ..... |
| Oct. 5, '08 | 3665 | − 4.3 | 14.58 | 13.59 | − 6.1 | ..... | 22.3 | 34.9 | ..... | ..... | ..... |
| 9h31m6 | 3666 | − 2.5 | 14.45 | 13.46 | − 8.9 | ..... | 18.9 | 31.8 | ..... | ..... | ..... |
| | 3667 | 9.0 | 14.60 | 13.61 | −23.4 | ..... | 4.9 | 17.2 | 31.7 | 44.4 | ..... |
| | 3668 | 7.4 | 14.36 | 13.37 | −21.3 | ..... | 6.2 | 18.2 | 32.4 | 45.5 | ..... |
| | 3669 | 12.9 | 14.04 | 13.05 | −21.9 | ..... | 5.3 | 17.1 | 30.3 | 43.5 | ..... |
| | 3670 | 17.2 | 14.27 | 13.28 | −22.2 | ..... | 5.2 | 17.8 | 31.3 | 44.0 | ..... |
| | 3671 | 19.0 | 14.34 | 13.35 | −24.0 | ..... | 3.9 | ..... | ..... | ..... | ..... |
| | 3672 | 14.9 | 14.55 | 13.56 | −25.9 | ..... | 2.2 | 15.1 | ..... | ..... | ..... |
| | 3674 | 12.4 | 14.40 | 13.41 | −17.7 | ..... | 10.1 | 23.0 | 36.0 | ..... | ..... |
| | 3675 | −12.1 | 14.77 | 13.78 | −12.2 | ..... | 16.9 | 29.3 | ..... | ..... | ..... |
| | 3676 | −10.2 | 14.72 | 13.73 | −19.2 | ..... | 9.8 | 22.1 | 36.0 | ..... | ..... |
| 3158 | 3673 | 14.9 | 14.34 | 13.35 | − 1.8 | 10.5 | 24.0 | ..... | ..... | ..... | ..... |
| Oct. 7, '08 | 3677 | −10.8 | 14.03 | 13.04 | 22.2 | 34.3 | ..... | ..... | ..... | ..... | ..... |
| 11h40m | 3678 | − 8.1 | 14.67 | 13.68 | 22.2 | 34.9 | ..... | ..... | ..... | ..... | ..... |
| | 3679 | − 4.8 | 15.00 | 14.01 | 17.8 | 30.8 | ..... | ..... | ..... | ..... | ..... |
| | 3680 | − 8.4 | 14.96 | 13.97 | 12.4 | 25.6 | 39.3 | ..... | ..... | ..... | ..... |
| | 3681 | − 6.2 | 14.29 | 13.30 | 11.7 | 23.7 | 37.3 | ..... | ..... | ..... | ..... |
| | 3682 | − 6.1 | 14.33 | 13.34 | 8.0 | 20.8 | 33.7 | ..... | ..... | ..... | ..... |
| | 3683 | − 8.9 | 14.39 | 13.40 | 7.0 | 19.7 | 32.8 | ..... | ..... | ..... | ..... |
| | 3684 | −12.7 | 14.78 | 13.79 | 9.0 | 21.8 | ..... | ..... | ..... | ..... | ..... |
| | 3685 | − 0.5 | 14.54 | 13.55 | 0.5 | 13.4 | 26.6 | ..... | ..... | ..... | ..... |
| | 3686 | 4.5 | 14.03 | 13.04 | 2.9 | 15.0 | 28.0 | ..... | ..... | ..... | ..... |
| | 3687 | 3.8 | 14.35 | 13.36 | − 2.6 | 10.0 | 23.3 | 36.3 | ..... | ..... | ..... |
| | 3688 | −19.4 | 13.86 | 12.87 | −12.5 | − 1.4 | 11.2 | 25.1 | ..... | ..... | ..... |
| | 3689 | −13.3 | 14.35 | 13.36 | −18.5 | − 6.1 | ..... | ..... | ..... | ..... | ..... |
| | 3690 | −10.9 | 14.35 | 13.36 | −19.8 | − 7.4 | ..... | ..... | ..... | ..... | ..... |
| | 3691 | −10.4 | 14.13 | 13.14 | −22.5 | −10.0 | 2.8 | ..... | ..... | ..... | ..... |
| | 3692 | − 9.8 | 15.02 | 14.03 | −27.1 | −14.3 | − 0.1 | ..... | ..... | ..... | ..... |
| | 3693 | −11.6 | 14.58 | 13.59 | −28.2 | −15.2 | − 2.0 | 11.5 | ..... | ..... | ..... |

TABLE I—*Continued*

| Plate Number and Date | Number | Latitude | Diurnal Motion | | Longitudes on Days of Observation | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sidereal | Synodic | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 3158 (*cont.*) | 3694 | −14°6 | 14°44 | 13°45 | −28°7 | −16°1 | − 2°8 | ..... | ..... | ..... | ..... |
| | 3695 | −14.5 | 15.00 | 14.01 | −31.0 | −18.0 | ..... | ..... | ..... | ..... | ..... |
| | 3696 | 17.2 | 14.03 | 13.04 | − 6.0 | 6.1 | ..... | ..... | ..... | ..... | ..... |
| | 3697 | 17.3 | 14.28 | 13.29 | − 8.0 | 4.2 | 17.3 | 30°5 | ..... | ..... | ..... |
| | 3698 | 22.0 | 14.13 | 13.14 | − 3.3 | 8.7 | 22.0 | ..... | ..... | ..... | ..... |
| | 3699 | − 4.7 | 15.00 | 14.01 | 26.3 | 39.3 | ..... | ..... | ..... | ..... | ..... |
| 3163 | 3700 | −12.8 | 14.93 | 13.94 | −33.4 | −19.5 | ..... | ..... | ..... | ..... | ..... |
| Oct. 8, '08 | 3701 | − 7.1 | 16.03 | 15.04 | 27.9 | 42.9 | ..... | ..... | ..... | ..... | ..... |
| $9^h56^m5$ | 3702 | −14.7 | 14.73 | 13.74 | 19.2 | 32.9 | ..... | ..... | ..... | ..... | ..... |
| | 3703 | 2.8 | 14.12 | 13.13 | 30.7 | 43.8 | ..... | ..... | ..... | ..... | ..... |
| | 3704 | − 2.7 | 14.43 | 13.44 | 23.9 | 37.3 | ..... | ..... | ..... | ..... | ..... |
| | 3705 | − 7.4 | 14.70 | 13.71 | 16.0 | 29.4 | 43.2 | ..... | ..... | ..... | ..... |
| | 3706 | −14.6 | 14.44 | 13.45 | − 8.9 | 3.3 | 17.3 | ..... | 44°2 | ..... | ..... |
| | 3708 | − 7.2 | 14.55 | 13.56 | −44.0 | −30.5 | −17.1 | ..... | ..... | ..... | ..... |
| | 3709 | − 8.5 | 14.75 | 13.76 | −38.1 | −24.5 | −10.8 | ..... | ..... | ..... | ..... |
| | 3711 | 19.3 | 14.12 | 13.13 | 22.0 | 35.1 | ..... | ..... | ..... | ..... | ..... |
| | 3712 | 18.4 | 14.63 | 13.64 | 25.6 | 39.2 | ..... | ..... | ..... | ..... | ..... |
| 3166 | 3710 | −14.6 | 14.62 | 13.63 | −31.0 | −17.8 | ..... | 9.2 | 23.0 | 38°3 | ..... |
| Oct. 9, '08 | 3713 | −13.4 | 14.43 | 13.44 | 6.4 | 20.2 | ..... | 46.5 | ..... | ..... | ..... |
| $9^h52^m7$ | 3714 | −11.1 | 14.48 | 13.49 | − 5.0 | 8.3 | ..... | ..... | ..... | ..... | ..... |
| | 3715 | − 8.9 | 14.18 | 13.19 | − 4.1 | 9.1 | ..... | 35.2 | ..... | ..... | ..... |
| | 3716 | −15.5 | 14.18 | 13.19 | −35.3 | −22.2 | ..... | 3.9 | 17.4 | ..... | ..... |
| | 3717 | − 2.4 | 14.13 | 13.14 | −48.1 | −34.6 | ..... | − 9.2 | 4.7 | 18.8 | ..... |
| | 3718 | 1.5 | 14.28 | 13.29 | −44.3 | −31.2 | ..... | ..... | ..... | ..... | ..... |
| | 3719 | 21.0 | 14.07 | 13.08 | 13.0 | 25.9 | ..... | ..... | ..... | ..... | ..... |
| 3170 | 3720 | −13.2 | 14.21 | 13.22 | −26.2 | ..... | 0.1 | 13.8 | 26.9 | 40.9 | ..... |
| Oct. 10, '08 | | | | | | | | | | | |
| $9^h32^m4$ | | | | | | | | | | | |
| 3173 | 3721 | −17.8 | 13.82 | 12.83 | − 1.1 | 12.0 | 25.8 | 38.0 | ..... | ..... | ..... |
| Oct. 12, '08 | 3722 | −19.6 | 14.70 | 13.71 | − 4.6 | 9.3 | ..... | ..... | ..... | ..... | ..... |
| $9^h18^m3$ | 3723 | −18.2 | 14.20 | 13.21 | − 9.2 | 5.3 | ..... | ..... | ..... | ..... | ..... |
| | 3724 | −14.2 | 15.10 | 14.11 | 4.0 | 18.3 | ..... | ..... | ..... | ..... | ..... |
| | 3725 | −14.1 | 14.70 | 13.71 | 6.2 | 20.1 | ..... | ..... | ..... | ..... | ..... |
| | 3726 | −11.3 | 15.10 | 14.11 | 8.7 | 23.0 | ..... | ..... | ..... | ..... | ..... |
| | 3727 | 2.1 | 14.76 | 13.77 | − 4.1 | 9.6 | 24.8 | ..... | ..... | ..... | ..... |
| | 3728 | 0.9 | 14.39 | 13.40 | − 8.7 | 5.0 | 19.0 | 32.3 | ..... | ..... | ..... |
| | 3729 | 8.0 | 15.28 | 14.29 | − 9.2 | 5.2 | 20.8 | ..... | ..... | ..... | ..... |
| | 3730 | 8.5 | 14.67 | 13.68 | −12.0 | 1.3 | 17.1 | 29.3 | ..... | ..... | ..... |
| | 3731 | 11.1 | 15.08 | 14.09 | −10.1 | 4.0 | 19.8 | 32.6 | ..... | ..... | ..... |
| | 3732 | − 8.6 | 14.90 | 13.91 | 15.3 | 29.3 | 44.5 | ..... | ..... | ..... | ..... |
| | 3733 | −21.4 | 14.01 | 13.02 | −19.5 | − 6.3 | ..... | ..... | ..... | ..... | ..... |
| | 3734 | −20.6 | 14.29 | 13.30 | −17.5 | − 3.8 | 10.9 | 23.6 | 35.6 | ..... | ..... |
| | 3735 | 8.6 | 14.71 | 13.72 | −19.3 | − 4.0 | 10.2 | 22.7 | ..... | ..... | ..... |
| | 3736 | −16.9 | 14.11 | 13.12 | 27.7 | 41.0 | ..... | ..... | ..... | ..... | ..... |
| 3177 | 3737 | 8.5 | 14.43 | 13.44 | − 2.1 | 12.6 | 25.1 | 38.2 | ..... | ..... | ..... |
| Oct. 13, '08 | 3738 | 11.2 | 14.18 | 13.19 | − 3.1 | 11.9 | 24.2 | 36.4 | ..... | ..... | ..... |
| $9^h38^m0$ | 3738′ | − 0.4 | 14.31 | 13.32 | 3.0 | 17.3 | 29.8 | 42.9 | ..... | ..... | ..... |
| | 3739 | −26.9 | 14.16 | 13.17 | 2.0 | 16.3 | ..... | ..... | ..... | ..... | ..... |
| | 3740 | −26.0 | 14.44 | 13.45 | −10.8 | 3.8 | ..... | ..... | ..... | ..... | ..... |
| | 3741 | −12.1 | 14.53 | 13.54 | −44.5 | −29.8 | ..... | ..... | ..... | ..... | ..... |
| | 3742 | 7.5 | 14.48 | 13.49 | −35.4 | −20.7 | − 8.0 | 5.0 | ..... | ..... | ..... |
| | 3743 | 8.8 | 14.53 | 13.54 | −39.2 | −24.5 | ..... | ..... | ..... | ..... | ..... |
| | 3744 | 7.1 | 14.93 | 13.94 | −41.7 | −26.3 | −13.1 | 0.0 | ..... | ..... | ..... |
| | 3745 | 4.4 | 14.99 | 14.00 | −30.2 | −15.0 | ..... | ..... | ..... | ..... | ..... |
| | 3746 | 5.2 | 14.81 | 13.82 | −24.0 | − 9.0 | ..... | ..... | ..... | ..... | ..... |
| 3182 | 3748 | −27.8 | 13.79 | 12.80 | 14.4 | 26.5 | ..... | ..... | ..... | ..... | ..... |
| Oct. 14, '08 | 3749 | −21.1 | 14.53 | 13.54 | 25.0 | 37.8 | ..... | ..... | ..... | ..... | ..... |
| $11^h41^m4$ | 3751 | −19.7 | 13.90 | 12.91 | 15.7 | 27.9 | ..... | ..... | ..... | ..... | ..... |
| 3188 | 3752 | 10.8 | 14.49 | 13.50 | −12.1 | 0.9 | ..... | ..... | ..... | ..... | ..... |
| Oct. 15, '08 | 3753 | 9.4 | 15.01 | 14.02 | 32.0 | 45.5 | ..... | ..... | ..... | ..... | ..... |
| $10^h22^m4$ | 3754 | −24.2 | 14.18 | 13.19 | 23.3 | 36.0 | ..... | ..... | ..... | ..... | ..... |
| | 3755 | 10.1 | 13.77 | 12.78 | 24.9 | 37.2 | ..... | ..... | ..... | ..... | ..... |

TABLE I—*Continued*

| Plate Number and Date | Number | Latitude | Diurnal Motion | | Longitudes on Days of Observation | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sidereal | Synodic | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 3189 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Oct. 16, '08 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| $9^h28^m7$ | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 3195 | 3760 | − 7°.7 | 14°.18 | 13°.18 | 14°.9 | ..... | 40°.8 | ..... | ..... | ..... | ..... |
| Nov. 2, '08 | 3761 | − 7.6 | 14.84 | 13.84 | 11.2 | ..... | 38.4 | ..... | ..... | ..... | ..... |
| $11^h55^m6$ | 3762 | − 7.7 | 14.64 | 13.64 | 8.1 | ..... | 34.9 | ..... | ..... | ..... | ..... |
| | 3763 | − 8.0 | 14.08 | 13.08 | − 5.4 | ..... | 20.3 | ..... | ..... | ..... | ..... |
| | 3764 | − 3.9 | 14.58 | 13.58 | −23.0 | ..... | 3.7 | ..... | ..... | ..... | ..... |
| | 3765 | 17.6 | 14.23 | 13.23 | − 2.1 | ..... | 23.9 | ..... | ..... | ..... | ..... |
| | 3766 | 15.6 | 14.29 | 13.29 | − 6.0 | ..... | 19.8 | ..... | 46°.0 | ..... | ..... |
| | 3767 | − 5.8 | 14.42 | 13.42 | −16.7 | ..... | 9.9 | ..... | 35.8 | ..... | ..... |
| | 3768 | −11.5 | 14.69 | 13.69 | 0.0 | ..... | 26.9 | ..... | ..... | ..... | ..... |
| | 3769 | −13.0 | 15.19 | 14.19 | 5.9 | ..... | 33.8 | ..... | ..... | ..... | ..... |
| | 3770 | 15.3 | 14.33 | 13.33 | 0.5 | ..... | 26.7 | ..... | ..... | ..... | ..... |
| | 3771 | 13.8 | 14.38 | 13.38 | 2.7 | ..... | 29.0 | ..... | ..... | ..... | ..... |
| | 3772 | − 6.9 | 14.99 | 13.99 | − 0.8 | ..... | 26.7 | ..... | ..... | ..... | ..... |
| | 3773 | −22.9 | 13.16 | 12.16 | −11.3 | ..... | 12.6 | ..... | ..... | ..... | ..... |
| | 3774 | −19.6 | 14.08 | 13.08 | −19.2 | ..... | 6.5 | ..... | ..... | ..... | ..... |
| 3197 | 3775 | 14.3 | 14.72 | 13.72 | 15.5 | ..... | 42.2 | ..... | ..... | ..... | ..... |
| Nov. 4, '08 | 3776 | 12.6 | 14.41 | 13.41 | 14.1 | ..... | 40.2 | ..... | ..... | ..... | ..... |
| $11^h05^m9$ | 3778 | − 9.6 | 14.87 | 13.87 | −37.7 | ..... | −10.7 | ..... | ..... | ..... | ..... |
| 3198 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Nov. 6, '08 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| $9^h48^m4$ | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 3213 | 3779 | 0.9 | 14.65 | 13.64 | 22.9 | 36°.5 | ..... | ..... | ..... | ..... | ..... |
| Nov. 19, '08 | 3780 | 3.2 | 14.75 | 13.74 | 18.4 | 32.1 | ..... | ..... | ..... | ..... | ..... |
| $11^h50^m0$ | 3781 | 6.2 | 14.45 | 13.44 | 18.9 | 32.3 | ..... | ..... | ..... | ..... | ..... |
| | 3782 | 6.2 | 15.26 | 14.25 | 24.7 | 38.9 | ..... | ..... | ..... | ..... | ..... |
| | 3783 | − 5.2 | 15.46 | 14.45 | 33.3 | 47.7 | ..... | ..... | ..... | ..... | ..... |
| | 3784 | 3.8 | 14.45 | 13.44 | 15.7 | 29.1 | ..... | ..... | ..... | ..... | ..... |
| | 3785 | 6.0 | 14.65 | 13.64 | 14.6 | 28.2 | ..... | ..... | ..... | ..... | ..... |
| | 3786 | 7.2 | 14.75 | 13.74 | 9.5 | 23.2 | ..... | ..... | ..... | ..... | ..... |
| | 3787 | 13.4 | 14.55 | 13.54 | 15.0 | 28.5 | ..... | ..... | ..... | ..... | ..... |
| | 3788 | 13.9 | 14.55 | 13.54 | 12.7 | 26.3 | ..... | ..... | ..... | ..... | ..... |
| | 3789 | 15.8 | 14.35 | 13.34 | 8.0 | 21.3 | ..... | ..... | ..... | ..... | ..... |
| | 3790 | 14.8 | 14.25 | 13.24 | 5.9 | 19.1 | ..... | ..... | ..... | ..... | ..... |
| | 3791 | 8.9 | 15.16 | 14.15 | 4.9 | 19.0 | ..... | ..... | ..... | ..... | ..... |
| | 3792 | 4.9 | 14.45 | 13.44 | − 4.2 | 9.2 | ..... | ..... | ..... | ..... | ..... |
| | 3793 | 0.0 | 14.75 | 13.74 | − 6.5 | 7.2 | ..... | ..... | ..... | ..... | ..... |
| | 3794 | − 9.0 | 14.75 | 13.74 | − 5.7 | 8.0 | ..... | ..... | ..... | ..... | ..... |
| | 3795 | 7.1 | 13.95 | 12.94 | − 9.0 | 3.9 | ..... | ..... | ..... | ..... | ..... |
| | 3796 | 13.2 | 14.35 | 13.34 | −31.1 | −17.8 | ..... | ..... | ..... | ..... | ..... |
| 3215 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Nov. 20, '08 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| $11^h45^m3$ | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 3220 | 3797 | − 6.8 | 14.87 | 13.86 | 5.9 | 19.9 | ..... | ..... | ..... | ..... | ..... |
| Nov. 27, '08 | 3798 | − 2.3 | 14.38 | 13.37 | 6.0 | 19.5 | ..... | ..... | ..... | ..... | ..... |
| $11^h36^m5$ | 3799 | 7.4 | 14.28 | 13.27 | −11.7 | 1.7 | ..... | ..... | ..... | ..... | ..... |
| | 3800 | 5.1 | 14.97 | 13.96 | −14.1 | 0.0 | ..... | ..... | ..... | ..... | ..... |
| | 3801 | 13.2 | 13.88 | 12.87 | −30.0 | −17.0 | ..... | ..... | ..... | ..... | ..... |
| | 3802 | 16.3 | 13.68 | 12.67 | −29.7 | −16.9 | ..... | ..... | ..... | ..... | ..... |
| | 3803 | 16.0 | 13.78 | 12.77 | −31.2 | −18.3 | ..... | ..... | ..... | ..... | ..... |
| | 3804 | 13.9 | 13.98 | 12.97 | −35.1 | −22.0 | ..... | ..... | ..... | ..... | ..... |
| | 3805 | 15.5 | 14.18 | 13.17 | −36.0 | −22.7 | ..... | ..... | ..... | ..... | ..... |
| | 3806 | 14.9 | 13.88 | 12.87 | −38.0 | −25.0 | ..... | ..... | ..... | ..... | ..... |
| | 3807 | −10.6 | 13.78 | 12.77 | −13.1 | − 0.2 | ..... | ..... | ..... | ..... | ..... |
| | 3808 | − 8.9 | 14.67 | 13.66 | −18.3 | − 4.5 | ..... | ..... | ..... | ..... | ..... |

TABLE I—*Continued*

| Plate Number and Date | Number | Latitude | Diurnal Motion | | Longitudes on Days of Observation | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sidereal | Synodic | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 3220 (*cont.*) | 3809 | −16°.6 | 14°.57 | 13°.56 | −10°.2 | 3°.5 | ..... | ..... | ..... | ..... | ..... |
| | 3810 | −16.1 | 14.77 | 13.76 | − 8.9 | 5.0 | ..... | ..... | ..... | ..... | ..... |
| | 3811 | −16.5 | 15.27 | 14.26 | − 5.7 | 8.7 | ..... | ..... | ..... | ..... | ..... |
| 3223 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Nov. 28, '08 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| $11^h50^m9$ | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |

## ZONAL SUMMARIES

The sidereal motions of Table I are collected in Table II in zones five degrees wide. At the head of each zone are given the mean latitude of the points and the mean diurnal sidereal motion. In obtaining these means all determinations were assigned equal weight. Those points which were followed for intervals of several days perhaps give more accurate determinations than those followed for but a single day, but in all points there was some change in form and this is surely larger for points followed over considerable intervals. Therefore the assignment of equal weight is considered justifiable.

TABLE II

ZONAL SUMMARIES

Zone 0° to 5° { Mean Latitude = + 2°.88
Mean Diurnal Motion = 14°.58

| Number | Days | Diurnal Motion Sidereal | Heliographic Latitude | Number | Days | Diurnal Motion Sidereal | Heliographic Latitude | Number | Days | Diurnal Motion Sidereal | Heliographic Latitude |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 164..... | 2 | 13°.57 | 1°.3 | 2161..... | 2 | 15°.36 | 3°.8 | 2701..... | 2 | 14°.38 | 1°.2 |
| 277..... | 7 | 14.55 | 4.1 | 2168..... | 2 | 15.20 | 4.8 | 2704..... | 2 | 14.43 | 4.4 |
| 340..... | 2 | 15.15 | 3.9 | 2169..... | 2 | 15.60 | 2.7 | 2764..... | 3 | 14.68 | 4.1 |
| 532..... | 2 | 15.19 | 3.5 | 2213..... | 2 | 14.36 | 4.9 | 2770..... | 3 | 14.01 | 1.4 |
| 581..... | 2 | 15.53 | 0.8 | 2229..... | 2 | 14.55 | 4.7 | 2775..... | 2 | 15.23 | 1.1 |
| 895..... | 2 | 14.60 | 1.6 | 2231..... | 2 | 14.92 | 0.1 | 2823..... | 2 | 15.09 | 3.8 |
| 1039..... | 3 | 14.82 | 0.6 | 2379..... | 2 | 15.39 | 4.0 | 2849..... | 2 | 14.42 | 1.2 |
| 1066..... | 2 | 14.32 | 2.6 | 2388..... | 5 | 14.26 | 4.7 | 2850..... | 2 | 14.73 | 1.4 |
| 1328..... | 3 | 14.79 | 3.7 | 2419..... | 2 | 13.99 | 4.9 | 2851′..... | 2 | 15.51 | 2.1 |
| 1515..... | 3 | 15.20 | 3.3 | 2420..... | 2 | 14.49 | 4.6 | 2852..... | 2 | 15.01 | 3.8 |
| 1520..... | 2 | 15.25 | 2.8 | 2421..... | 2 | 14.90 | 1.8 | 2854..... | 3 | 14.67 | 0.8 |
| 1586..... | 2 | 14.94 | 2.9 | 2445..... | 4 | 14.99 | 4.7 | 2861..... | 2 | 14.71 | 4.9 |
| 1587..... | 3 | 15.26 | 5.0 | 2446..... | 2 | 14.36 | 4.8 | 2862..... | 3 | 13.93 | 0.4 |
| 1604..... | 2 | 14.30 | 3.5 | 2451..... | 4 | 14.58 | 0.8 | 2868..... | 2 | 14.71 | 3.4 |
| 1699..... | 3 | 13.99 | 5.0 | 2452..... | 2 | 14.36 | 3.2 | 2876..... | 3 | 14.62 | 4.3 |
| 1790..... | 2 | 14.39 | 4.0 | 2453..... | 2 | 15.26 | 4.1 | 2890..... | 2 | 13.71 | 1.2 |
| 1791..... | 2 | 14.39 | 2.1 | 2475..... | 3 | 14.75 | 2.3 | 2893..... | 2 | 14.93 | 4.3 |
| 1792..... | 2 | 13.71 | 1.4 | 2540..... | 2 | 13.58 | 3.1 | 2900..... | 2 | 13.85 | 4.8 |
| 1793..... | 2 | 14.68 | 3.4 | 2549..... | 2 | 14.77 | 1.9 | 2909..... | 3 | 14.42 | 7.0 |
| 1797..... | 2 | 14.10 | 4.5 | 2594..... | 2 | 14.73 | 4.8 | 2920..... | 2 | 14.98 | 0.7 |
| 1836..... | 2 | 14.44 | 4.6 | 2599..... | 6 | 14.67 | 3.1 | 2926..... | 2 | 15.58 | 0.1 |
| 1838..... | 2 | 15.25 | 4.4 | 2612..... | 2 | 14.72 | 2.1 | 2948..... | 2 | 14.18 | 2.5 |
| 1839..... | 2 | 14.74 | 3.0 | 2639..... | 2 | 14.40 | 0.7 | 2949..... | 2 | 14.43 | 2.3 |
| 1902..... | 2 | 15.31 | 4.2 | 2650..... | 2 | 14.32 | 2.4 | 2972..... | 2 | 15.03 | 1.5 |
| 1904..... | 2 | 14.93 | 4.9 | 2656..... | 4 | 14.66 | 4.9 | 3003..... | 2 | 14.11 | 1.3 |
| 1929..... | 2 | 15.03 | 1.2 | 2657..... | 3 | 14.05 | 3.4 | 3052..... | 2 | 14.63 | 3.2 |
| 1963..... | 2 | 14.42 | 4.6 | 2658..... | 3 | 14.72 | 1.3 | 3068..... | 3 | 14.22 | 3.8 |
| 1970..... | 2 | 14.56 | 3.6 | 2663..... | 3 | 13.63 | 3.5 | 3069..... | 2 | 14.54 | 3.8 |
| 1971..... | 2 | 14.97 | 2.6 | 2668..... | 2 | 14.73 | 0.4 | 3083..... | 2 | 14.82 | 0.9 |
| 1976..... | 2 | 14.05 | 3.2 | 2671..... | 5 | 14.16 | 2.6 | 3140..... | 2 | 14.61 | 1.0 |
| 1997..... | 2 | 14.66 | 0.3 | 2672..... | 5 | 14.38 | 3.2 | 3141..... | 2 | 14.31 | 3.7 |
| 1998..... | 2 | 15.28 | 4.0 | 2673..... | 5 | 14.49 | 0.7 | 3173..... | 2 | 13.78 | 1.5 |
| 2121..... | 3 | 14.61 | 3.0 | 2687..... | 4 | 14.02 | 4.6 | 3174..... | 2 | 13.47 | 3.5 |
| 2146..... | 2 | 14.47 | 1.9 | 2688..... | 2 | 14.50 | 4.0 | | | | |

TABLE II—*Continued*

Zone 0° to −5° { Mean Latitude = − 2°.65
Mean Diurnal Motion = 14°.53

| Number | Days | Diurnal Motion Sidereal | Heliographic Latitude | Number | Days | Diurnal Motion Sidereal | Heliographic Latitude | Number | Days | Diurnal Motion Sidereal | Heliographic Latitude |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 97 | 4 | 14°.13 | −3°.9 | 2812 | 2 | 14°.02 | −2°.3 | 3318 | 2 | 15°.18 | −2°.5 |
| 208 | 2 | 13.71 | −5.0 | 2813 | 2 | 14.23 | −4.2 | 3329 | 2 | 15.71 | −1.1 |
| 320 | 2 | 13.76 | −2.4 | 2824 | 2 | 14.90 | −1.3 | 3330 | 2 | 15.50 | −3.5 |
| 336 | 2 | 14.81 | −4.5 | 2828 | 2 | 14.02 | −4.0 | 3376 | 3 | 14.55 | −4.0 |
| 573 | 2 | 14.33 | −4.8 | 2833 | 2 | 15.28 | −0.1 | 3418 | 4 | 14.68 | −2.9 |
| 640 | 2 | 14.37 | −2.8 | 2834 | 2 | 14.90 | −1.5 | 3446 | 2 | 14.16 | −4.1 |
| 869 | 2 | 14.88 | −2.1 | 2840 | 2 | 14.63 | −4.7 | 3448 | 2 | 13.95 | −0.5 |
| 870 | 6 | 14.23 | −1.1 | 2841 | 2 | 14.53 | −0.2 | 3449 | 2 | 14.37 | −2.3 |
| 988 | 2 | 13.55 | −4.6 | 2842 | 2 | 15.05 | −0.9 | 3471 | 5 | 14.58 | −4.1 |
| 1179 | 2 | 13.99 | −3.3 | 2869 | 3 | 14.13 | −3.6 | 3472 | 3 | 14.58 | −2.0 |
| 1467 | 2 | 15.29 | −2.8 | 2924 | 2 | 14.59 | −1.9 | 3473 | 4 | 14.47 | −2.9 |
| 1659 | 2 | 14.43 | −4.8 | 2947 | 2 | 14.52 | −0.4 | 3484 | 2 | 14.71 | −2.7 |
| 1938 | 2 | 14.62 | −0.1 | 2951 | 2 | 14.35 | −4.0 | 3485 | 3 | 14.33 | −0.9 |
| 2074 | 3 | 14.53 | −4.4 | 2970 | 2 | 15.03 | −4.6 | 3487 | 4 | 14.74 | −5.0 |
| 2232 | 2 | 15.10 | −0.3 | 2971 | 3 | 15.12 | −3.1 | 3509 | 2 | 14.75 | −2.5 |
| 2279 | 2 | 15.03 | −4.8 | 2992 | 2 | 15.39 | −4.2 | 3528 | 3 | 14.76 | −0.2 |
| 2444 | 2 | 14.96 | −0.9 | 3001 | 2 | 14.41 | −4.6 | 3529 | 6 | 14.48 | −0.7 |
| 2450 | 2 | 14.06 | −2.2 | 3002 | 4 | 14.91 | −0.1 | 3541 | 2 | 14.82 | 0.0 |
| 2455 | 2 | 14.16 | −2.0 | 3004 | 5 | 14.61 | −4.1 | 3546 | 2 | 14.92 | −3.1 |
| 2565 | 3 | 14.43 | −5.0 | 3008 | 2 | 14.60 | −1.6 | 3551 | 2 | 13.80 | −3.4 |
| 2566 | 2 | 14.61 | −1.5 | 3009 | 6 | 14.94 | −3.8 | 3552 | 2 | 14.62 | −0.6 |
| 2567 | 4 | 13.91 | −4.7 | 3051 | 2 | 14.93 | −2.6 | 3558 | 2 | 14.84 | −4.5 |
| 2631 | 2 | 13.96 | −3.2 | 3088 | 2 | 14.62 | −4.6 | 3560 | 2 | 14.12 | −2.1 |
| 2642 | 2 | 13.74 | −3.2 | 3089 | 2 | 14.01 | −4.4 | 3592 | 2 | 14.99 | −0.3 |
| 2662 | 2 | 14.84 | −0.2 | 3090 | 2 | 15.03 | −2.3 | 3609 | 2 | 14.58 | −0.9 |
| 2676 | 5 | 14.23 | −3.3 | 3094 | 2 | 14.62 | −0.2 | 3623 | 2 | 14.55 | −1.0 |
| 2678 | 3 | 14.48 | −3.3 | 3139 | 2 | 14.51 | −0.9 | 3665 | 4 | 14.58 | −4.3 |
| 2702 | 2 | 15.09 | −5.0 | 3171 | 2 | 13.99 | −0.6 | 3666 | 4 | 14.45 | −2.5 |
| 2703 | 2 | 14.69 | −2.9 | 3178 | 2 | 13.77 | −2.0 | 3679 | 2 | 15.00 | −4.8 |
| 2719 | 3 | 14.87 | −3.5 | 3179 | 2 | 14.58 | −4.9 | 3685 | 3 | 14.54 | −0.5 |
| 2726 | 5 | 14.17 | −3.4 | 3182 | 3 | 14.59 | −4.2 | 3699 | 2 | 15.00 | −4.7 |
| 2731 | 2 | 14.81 | −0.6 | 3197 | 3 | 14.90 | −3.7 | 3704 | 2 | 14.43 | −2.7 |
| 2735 | 4 | 13.89 | −2.1 | 3287 | 2 | 13.95 | −3.3 | 3717 | 6 | 14.13 | −2.4 |
| 2807 | 3 | 15.03 | −1.9 | 3288 | 2 | 13.77 | −3.1 | 3738′ | 4 | 14.31 | −0.4 |
| 2808 | 3 | 14.52 | −4.9 | 3289 | 2 | 14.04 | −3.6 | 3764 | 3 | 14.58 | −3.9 |
| 2810 | 2 | 15.06 | −0.8 | 3314 | 2 | 14.02 | −2.8 | 3793 | 2 | 14.75 | 0.0 |
| 2811 | 2 | 14.85 | −0.5 | 3315 | 2 | 13.70 | −3.2 | 3798 | 2 | 14.38 | −2.3 |

TABLE II—*Continued*

Zone 5° to 10° { Mean Latitude = + 7°.86
Mean Diurnal Motion = 14°.51

| Number | Days | Diurnal Motion Sidereal | Heliographic Latitude | Number | Days | Diurnal Motion Sidereal | Heliographic Latitude | Number | Days | Diurnal Motion Sidereal | Heliographic Latitude |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 144 | 2 | 15°.28 | 8°.1 | 1536 | 2 | 14°.64 | 9°.9 | 2380 | 2 | 16°.02 | 9°.7 |
| 27 | 3 | 13.83 | 7.2 | 1537 | 2 | 14.64 | 9.7 | 2381 | 2 | 15.39 | 6.9 |
| 272 | 2 | 14.49 | 7.5 | 1587 | 3 | 15.26 | 5.0 | 2382 | 2 | 15.39 | 5.7 |
| 274 | 4 | 14.35 | 9.8 | 1603 | 2 | 14.50 | 8.9 | 2386 | 5 | 14.26 | 8.2 |
| 278 | 4 | 14.34 | 8.1 | 1637 | 3 | 14.35 | 9.3 | 2387 | 5 | 14.15 | 6.9 |
| 294 | 2 | 14.19 | 7.2 | 1646 | 2 | 13.93 | 8.4 | 2389 | 5 | 14.38 | 8.1 |
| 295 | 2 | 14.30 | 8.7 | 1671 | 3 | 14.60 | 7.5 | 2399 | 2 | 15.60 | 9.1 |
| 299 | 2 | 14.62 | 9.1 | 1699 | 3 | 13.99 | 5.0 | 2400 | 3 | 13.95 | 6.0 |
| 300 | 3 | 14.45 | 8.2 | 1700 | 2 | 14.03 | 7.1 | 2402 | 4 | 14.24 | 7.6 |
| 305 | 3 | 15.00 | 7.1 | 1737 | 2 | 14.69 | 8.2 | 2405 | 2 | 14.29 | 8.8 |
| 339 | 2 | 14.25 | 8.8 | 1738 | 2 | 14.19 | 9.9 | 2406 | 2 | 14.09 | 8.8 |
| 362 | 3 | 14.29 | 9.5 | 1741 | 2 | 14.39 | 7.8 | 2414 | 2 | 13.58 | 7.8 |
| 393 | 3 | 14.09 | 8.9 | 1742 | 2 | 14.09 | 7.3 | 2415 | 2 | 14.19 | 9.9 |
| 421 | 2 | 14.63 | 6.2 | 1764 | 2 | 14.49 | 8.4 | 2417 | 2 | 14.39 | 8.7 |
| 484 | 2 | 14.05 | 9.3 | 1794 | 2 | 14.68 | 9.9 | 2418 | 2 | 14.09 | 5.7 |
| 529 | 2 | 14.55 | 9.7 | 1795 | 2 | 14.49 | 10.0 | 2447 | 4 | 13.86 | 9.1 |
| 530 | 2 | 14.87 | 6.2 | 1796 | 2 | 14.39 | 5.3 | 2448 | 4 | 14.30 | 8.6 |
| 531 | 2 | 14.44 | 6.0 | 1800 | 2 | 14.00 | 5.4 | 2449 | 4 | 15.06 | 5.6 |
| 533 | 2 | 15.08 | 6.2 | 1832 | 2 | 14.54 | 9.9 | 2454 | 4 | 14.67 | 8.3 |
| 534 | 2 | 14.44 | 7.5 | 1833 | 2 | 14.44 | 7.9 | 2474 | 3 | 15.00 | 7.9 |
| 597 | 2 | 15.64 | 9.1 | 1834 | 2 | 14.74 | 8.3 | 2476 | 3 | 14.75 | 7.0 |
| 599 | 4 | 14.21 | 9.8 | 1835 | 2 | 15.05 | 6.9 | 2478 | 2 | 15.58 | 7.9 |
| 626 | 3 | 14.94 | 8.3 | 1837 | 2 | 14.95 | 6.9 | 2479 | 2 | 14.75 | 7.9 |
| 627 | 2 | 14.78 | 8.7 | 1840 | 2 | 14.84 | 6.6 | 2480 | 3 | 15.54 | 9.5 |
| 628 | 3 | 14.55 | 6.1 | 1842 | 2 | 15.15 | 6.0 | 2481 | 3 | 14.51 | 7.1 |
| 660 | 3 | 14.58 | 6.7 | 1843 | 2 | 14.95 | 9.4 | 2484 | 2 | 15.06 | 9.0 |
| 666 | 3 | 14.45 | 9.5 | 1849 | 2 | 14.34 | 9.1 | 2485 | 2 | 14.23 | 9.3 |
| 667 | 3 | 14.20 | 7.0 | 1850 | 2 | 15.55 | 8.6 | 2478′ | 2 | 14.96 | 6.1 |
| 668 | 3 | 14.36 | 8.5 | 1852 | 2 | 13.43 | 9.3 | 2504 | 2 | 15.38 | 7.2 |
| 670 | 2 | 13.80 | 8.0 | 1903 | 2 | 14.93 | 8.1 | 2507 | 2 | 14.98 | 8.1 |
| 671 | 3 | 13.90 | 9.1 | 1906 | 2 | 14.08 | 9.8 | 2508 | 4 | 14.16 | 5.5 |
| 689 | 2 | 14.88 | 9.0 | 1913 | 2 | 14.65 | 7.8 | 2516 | 2 | 14.98 | 10.0 |
| 690 | 2 | 14.99 | 6.1 | 1915 | 2 | 14.27 | 8.7 | 2519 | 4 | 14.24 | 9.8 |
| 710 | 5 | 14.48 | 8.8 | 1939 | 2 | 14.82 | 5.1 | 2541 | 3 | 14.17 | 5.5 |
| 711 | 5 | 14.18 | 8.6 | 1941 | 2 | 15.02 | 6.4 | 2610 | 3 | 15.13 | 5.2 |
| 712 | 4 | 14.17 | 6.0 | 1953 | 2 | 15.12 | 8.7 | 2611 | 3 | 14.31 | 5.2 |
| 740 | 2 | 14.69 | 9.7 | 1954 | 2 | 14.82 | 5.3 | 2614 | 2 | 14.62 | 6.5 |
| 809 | 2 | 15.59 | 8.8 | 1961 | 2 | 14.52 | 8.5 | 2640 | 7 | 14.50 | 7.8 |
| 813 | 4 | 14.65 | 8.4 | 1964 | 2 | 14.72 | 8.3 | 2641 | 2 | 14.84 | 9.8 |
| 913 | 2 | 14.13 | 9.0 | 2007 | 6 | 14.46 | 8.4 | 2643 | 2 | 15.17 | 6.3 |
| 941 | 2 | 15.23 | 9.0 | 2022 | 2 | 14.89 | 9.1 | 2651 | 2 | 13.81 | 6.7 |
| 1004 | 3 | 15.43 | 6.7 | 2023 | 2 | 14.06 | 9.0 | 2654 | 4 | 14.67 | 8.4 |
| 1020 | 3 | 14.48 | 8.9 | 2024 | 2 | 14.16 | 8.1 | 2655 | 4 | 14.55 | 9.9 |
| 1030 | 2 | 14.52 | 10.0 | 2029 | 2 | 13.75 | 7.7 | 2659 | 2 | 14.42 | 5 7 |
| 1031 | 2 | 14.32 | 7.6 | 2033 | 6 | 14.24 | 9.3 | 2661 | 2 | 14.53 | 8.6 |
| 1038 | 2 | 14.52 | 6.7 | 2057 | 4 | 14.65 | 6.3 | 2666 | 4 | 15.40 | 7.9 |
| 1084 | 4 | 14.65 | 8.7 | 2071 | 3 | 14.93 | 8.9 | 2669 | 3 | 14.90 | 5.8 |
| 1101 | 4 | 14.87 | 9.5 | 2116 | 4 | 14.35 | 5.3 | 2670 | 3 | 14.72 | 5.8 |
| 1148 | 2 | 14.77 | 9.3 | 2117 | 4 | 14.79 | 7.6 | 2674 | 4 | 14.58 | 6.7 |
| 1318 | 2 | 15.16 | 7.1 | 2119 | 3 | 14.29 | 8.5 | 2685 | 4 | 13.95 | 9.2 |
| 1319 | 2 | 13.97 | 7.3 | 2120 | 4 | 14.76 | 5.5 | 2686 | 3 | 14.33 | 8.0 |
| 1323 | 3 | 13.69 | 9.5 | 2193 | 2 | 14.38 | 8.2 | 2696 | 2 | 13.98 | 9.6 |
| 1326 | 2 | 15.06 | 8.2 | 2195 | 2 | 14.28 | 6.5 | 2705 | 2 | 14.50 | 9.5 |
| 1327 | 2 | 15.26 | 8.1 | 2196 | 2 | 14.28 | 5.2 | 2768 | 3 | 14.62 | 7.4 |
| 1332 | 3 | 13.77 | 9.4 | 2197 | 2 | 14.89 | 5.9 | 2769 | 3 | 14.52 | 6.9 |
| 1341 | 2 | 14.64 | 8.5 | 2208 | 3 | 13.41 | 8.4 | 2774 | 3 | 14.11 | 4.8 |
| 1354 | 2 | 13.05 | 8.0 | 2209 | 3 | 14.61 | 5.1 | 2776 | 2 | 14.41 | 6.1 |
| 1392 | 3 | 14.31 | 7.6 | 2214 | 2 | 14.92 | 7.9 | 2783 | 2 | 15.43 | 8.9 |
| 1409 | 2 | 14.81 | 9.8 | 2227 | 2 | 15.19 | 7.9 | 2799 | 2 | 14.10 | 9.0 |
| 1440 | 2 | 14.45 | 8.6 | 2228 | 2 | 15.01 | 9.1 | 2800 | 2 | 14.30 | 7.8 |
| 1441 | 2 | 14.27 | 5.7 | 2230 | 2 | 14.73 | 7.5 | 2801 | 3 | 14.47 | 10.0 |
| 1452 | 2 | 14.18 | 7.9 | 2248 | 2 | 14.46 | 5.8 | 2802 | 2 | 14.40 | 8.0 |
| 1453 | 2 | 13.99 | 9.8 | 2260 | 4 | 14.30 | 8.0 | 2804 | 3 | 14.62 | 10.0 |
| 1455 | 2 | 13.62 | 5.5 | 2296 | 2 | 14.64 | 8.5 | 2806 | 3 | 14.88 | 10.0 |
| 1500 | 3 | 13.94 | 7.8 | 2297 | 2 | 14.44 | 8.5 | 2846 | 2 | 14.21 | 7.8 |
| 1501 | 3 | 14.13 | 8.7 | 2298 | 7 | 14.04 | 7.6 | 2847 | 2 | 14.63 | 6.0 |
| 1521 | 2 | 14.31 | 7.5 | 2319 | 2 | 13.21 | 9.0 | 2853 | 2 | 14.71 | 5.6 |
| 1535 | 2 | 14.64 | 7.7 | 2358 | 2 | 14.68 | 7.7 | 2855 | 2 | 14.71 | 8.0 |

TABLE II—*Continued*

Zone 5° to 10°—*Continued*

| Number | Days | Diurnal Motion Sidereal | Heliographic Latitude | Number | Days | Diurnal Motion Sidereal | Heliographic Latitude | Number | Days | Diurnal Motion Sidereal | Heliographic Latitude |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2857 | 3 | 14°92 | 6°6 | 3133 | 2 | 13°98 | 9°4 | 3460 | 4 | 14°61 | 8°2 |
| 2863 | 3 | 14.57 | 9.1 | 3136 | 2 | 15.62 | 6.3 | 3474 | 5 | 14.90 | 6.9 |
| 2864 | 3 | 14.52 | 5.5 | 3137 | 2 | 13.86 | 6.3 | 3493 | 2 | 14.37 | 6.0 |
| 2865 | 3 | 14.52 | 9.7 | 3138 | 2 | 13.98 | 8.7 | 3496 | 2 | 14.47 | 7.0 |
| 2867 | 3 | 13.88 | 6.7 | 3143 | 2 | 13.92 | 5.9 | 3497 | 2 | 13.31 | 9.6 |
| 2873 | 2 | 14.41 | 7.4 | 3175 | 2 | 15.08 | 8.3 | 3501 | 2 | 14.47 | 6.7 |
| 2891 | 2 | 14.51 | 6.7 | 3220 | 4 | 13.21 | 9.2 | 3563 | 2 | 14.50 | 7.9 |
| 2892 | 3 | 14.62 | 7.0 | 3228 | 3 | 14.34 | 6.4 | 3564 | 4 | 14.43 | 5.8 |
| 2901 | 2 | 14.63 | 5.7 | 3229 | 3 | 14.09 | 7.4 | 3566 | 2 | 14.41 | 5.8 |
| 2906 | 3 | 14.01 | 7.9 | 3230 | 2 | 14.88 | 8.4 | 3569 | 2 | 14.12 | 8.3 |
| 2907 | 3 | 14.58 | 5.2 | 3255 | 2 | 13.94 | 5.6 | 3585 | 2 | 15.29 | 10.0 |
| 2908 | 3 | 14.27 | 8.2 | 3261 | 2 | 14.21 | 8.2 | 3602 | 2 | 13.98 | 9.8 |
| 2910 | 3 | 14.42 | 7.0 | 3262 | 2 | 13.68 | 7.6 | 3605 | 2 | 14.18 | 9.8 |
| 2953 | 2 | 13.45 | 9.0 | 3269 | 2 | 14.86 | 9.2 | 3611 | 2 | 14.35 | 9.2 |
| 2957 | 3 | 14.98 | 6.4 | 3270 | 2 | 13.58 | 6.0 | 3619 | 2 | 14.75 | 6.9 |
| 2960 | 3 | 14.37 | 9.7 | 3271 | 2 | 14.50 | 7.7 | 3624 | 2 | 13.57 | 9.5 |
| 2961 | 3 | 14.88 | 7.7 | 3272 | 2 | 13.95 | 9.2 | 3632 | 4 | 14.71 | 6.8 |
| 2968 | 2 | 14.14 | 6.3 | 3282 | 2 | 14.41 | 10.0 | 3633 | 5 | 14.53 | 8.2 |
| 2969 | 2 | 14.44 | 8.7 | 3303 | 2 | 14.23 | 5.4 | 3662 | 2 | 13.09 | 6.5 |
| 2977 | 2 | 14.53 | 9.6 | 3304 | 2 | 15.29 | 5.1 | 3664 | 4 | 14.77 | 7.4 |
| 2979 | 2 | 13.74 | 6.0 | 3305 | 2 | 15.08 | 7.8 | 3667 | 6 | 14.60 | 9.0 |
| 2980 | 2 | 13.93 | 8.4 | 3328 | 2 | 13.27 | 7.3 | 3668 | 6 | 14.36 | 7.4 |
| 2982 | 2 | 14.51 | 8.6 | 3343 | 2 | 14.27 | 9.9 | 3729 | 3 | 15.28 | 8.0 |
| 2983 | 2 | 14.80 | 7.5 | 3354 | 4 | 14.22 | 9.5 | 3730 | 4 | 14.67 | 8.5 |
| 2984 | 2 | 13.92 | 7.3 | 3361 | 4 | 14.95 | 7.4 | 3735 | 4 | 14.71 | 8.6 |
| 2999 | 2 | 14.70 | 7.5 | 3362′ | 3 | 14.74 | 5.3 | 3737 | 4 | 14.43 | 8.5 |
| 3011 | 4 | 14.46 | 7.6 | 3354′ | 2 | 14.65 | 9.1 | 3742 | 4 | 14.48 | 7.5 |
| 3012 | 2 | 15.21 | 8.7 | 3359′ | 2 | 14.65 | 10.0 | 3743 | 2 | 14.53 | 8.8 |
| 3015 | 2 | 14.63 | 9.9 | 3360′ | 2 | 14.34 | 9.3 | 3744 | 4 | 14.93 | 7.1 |
| 3028 | 2 | 15.08 | 9.8 | 3370 | 7 | 14.29 | 7.0 | 3746 | 2 | 14.81 | 5.2 |
| 3029 | 2 | 13.89 | 7.5 | 3400 | 5 | 14.76 | 8.9 | 3753 | 2 | 15.01 | 9.4 |
| 3043 | 2 | 14.73 | 9.4 | 3401 | 4 | 14.78 | 9.2 | 3781 | 2 | 14.45 | 6.2 |
| 3046 | 2 | 14.30 | 9.3 | 3402 | 6 | 14.78 | 6.2 | 3782 | 2 | 15.26 | 6.2 |
| 3048 | 2 | 14.41 | 8.5 | 3403 | 2 | 15.34 | 9.8 | 3785 | 2 | 14.65 | 6.0 |
| 3049 | 2 | 13.98 | 6.1 | 3404 | 3 | 14.32 | 9.1 | 3786 | 2 | 14.75 | 7.2 |
| 3053 | 2 | 14.63 | 6.9 | 3405 | 3 | 14.71 | 5.3 | 3791 | 2 | 15.16 | 8.9 |
| 3070 | 2 | 15.36 | 9.8 | 3443 | 2 | 14.98 | 8.2 | 3795 | 2 | 13.95 | 7.1 |
| 3092 | 2 | 15.03 | 9.3 | 3457 | 3 | 14.38 | 7.1 | 3799 | 2 | 14.28 | 7.4 |
| 3123 | 2 | 14.48 | 9.3 | 3458 | 4 | 14.71 | 9.9 | 3800 | 2 | 14.97 | 5.1 |
| 3124 | 3 | 14.52 | 7.1 | 3459 | 3 | 14.53 | 8.8 | | | | |

TABLE II—*Continued*

Zone −5° to −10° { Mean Latitude = − 7°.71
Mean Diurnal Motion = 14°.52

| Number | Days | Diurnal Motion Sidereal | Heliographic Latitude | Number | Days | Diurnal Motion Sidereal | Heliographic Latitude | Number | Days | Diurnal Motion Sidereal | Heliographic Latitude |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 96 | 4 | 14°.19 | − 5°.6 | 2528 | 4 | 14°.62 | − 6°.0 | 2967 | 3 | 14°.04 | − 9°.1 |
| 208 | 2 | 13.71 | − 5.0 | 2529 | 3 | 14.27 | − 7.1 | 2985 | 2 | 14.31 | − 8.1 |
| 249 | 2 | 14.76 | − 9.8 | 2564 | 2 | 14.27 | − 9.2 | 2990 | 2 | 14.11 | − 8.5 |
| 288 | 4 | 14.99 | − 6.2 | 2565 | 3 | 14.43 | − 5.0 | 2991 | 2 | 14.60 | − 5.7 |
| 335 | 3 | 14.82 | − 7.4 | 2578 | 3 | 14.58 | − 7.7 | 2993 | 2 | 15.00 | − 6.8 |
| 383 | 4 | 13.63 | − 6.8 | 2580 | 2 | 14.56 | − 5.7 | 2994 | 2 | 15.09 | − 8.2 |
| 384 | 5 | 13.90 | − 8.0 | 2581 | 3 | 14.79 | − 6.1 | 3000 | 4 | 14.36 | − 6.5 |
| 414 | 2 | 14.31 | − 9.1 | 2630 | 2 | 15.17 | − 7.8 | 3005 | 2 | 14.80 | − 5.7 |
| 416 | 2 | 14.73 | − 8.7 | 2634 | 2 | 15.06 | − 8.9 | 3006 | 2 | 14.80 | − 7.4 |
| 572 | 2 | 14.01 | −10.0 | 2660 | 2 | 14.01 | − 8.9 | 3007 | 5 | 14.71 | − 5.2 |
| 579 | 2 | 15.11 | − 5.5 | 2679 | 2 | 14.50 | − 6.0 | 3010 | 4 | 14.23 | −10.0 |
| 580 | 2 | 14.79 | − 7.3 | 2680 | 4 | 14.74 | − 6.8 | 3013 | 2 | 14.14 | − 5.9 |
| 582 | 2 | 14.15 | − 9.5 | 2682 | 4 | 14.85 | − 5.7 | 3017 | 3 | 14.65 | − 8.2 |
| 585 | 2 | 14.68 | −10.0 | 2684 | 3 | 14.74 | − 7.8 | 3020 | 3 | 14.16 | − 9.9 |
| 734 | 3 | 14.47 | − 5.1 | 2689 | 3 | 14.53 | − 6.5 | 3021 | 3 | 14.51 | − 8.0 |
| 868 | 6 | 14.12 | − 6.8 | 2692 | 2 | 14.69 | − 9.2 | 3022 | 3 | 14.85 | − 7.1 |
| 885 | 3 | 13.96 | − 8.3 | 2698 | 2 | 14.38 | − 8.0 | 3025 | 2 | 14.58 | − 9.9 |
| 886 | 3 | 14.05 | − 6.6 | 2699 | 2 | 13.98 | − 6.6 | 3034 | 2 | 14.68 | − 9.9 |
| 889 | 2 | 14.15 | − 8.0 | 2702 | 2 | 15.09 | − 5.0 | 3081 | 2 | 14.72 | − 6.7 |
| 1057 | 3 | 14.92 | − 8.6 | 2714 | 2 | 14.32 | − 8.5 | 3082 | 2 | 14.52 | − 5.5 |
| 1065 | 3 | 14.67 | − 8.3 | 2715 | 2 | 14.05 | − 9.9 | 3087 | 2 | 14.41 | − 6.3 |
| 1132 | 2 | 15.03 | − 5.7 | 2717 | 2 | 14.52 | − 9.1 | 3091 | 2 | 14.62 | − 9.7 |
| 1165 | 2 | 14.20 | − 6.8 | 2725 | 3 | 14.82 | − 5.6 | 3098 | 4 | 14.45 | − 8.9 |
| 1186 | 2 | 16.09 | − 7.0 | 2732 | 5 | 14.15 | − 6.7 | 3125 | 2 | 15.55 | − 8.1 |
| 1238 | 2 | 14.35 | − 9.0 | 2733 | 2 | 14.52 | − 8.4 | 3126 | 2 | 14.65 | − 7.2 |
| 1408 | 2 | 14.91 | − 7.1 | 2734 | 4 | 14.48 | − 8.6 | 3148 | 2 | 14.12 | − 9.0 |
| 1470 | 2 | 15.94 | − 8.0 | 2739 | 2 | 13.93 | − 7.1 | 3149 | 2 | 14.05 | − 9.3 |
| 1658 | 2 | 14.23 | − 6.1 | 2740 | 2 | 14.71 | − 8.2 | 3154 | 2 | 13.06 | − 6.3 |
| 1701 | 3 | 14.65 | − 8.5 | 2744 | 3 | 14.72 | − 6.8 | 3170 | 2 | 13.06 | − 7.0 |
| 1702 | 2 | 14.65 | − 7.0 | 2756 | 3 | 15.19 | − 7.2 | 3180 | 2 | 14.48 | − 9.5 |
| 1752 | 2 | 14.49 | − 9.5 | 2757 | 3 | 14.93 | − 7.2 | 3181 | 3 | 14.44 | − 7.0 |
| 1763 | 2 | 14.39 | − 5.1 | 2766 | 3 | 14.67 | − 5.5 | 3223 | 3 | 14.64 | − 9.5 |
| 1769 | 2 | 14.99 | − 8.8 | 2771 | 2 | 14.94 | − 8.0 | 3232 | 2 | 14.07 | − 8.7 |
| 1808 | 2 | 15.35 | − 6.9 | 2777 | 2 | 14.11 | − 8.1 | 3253 | 2 | 14.34 | − 9.3 |
| 1809 | 2 | 13.23 | − 9.4 | 2789 | 2 | 13.59 | − 7.0 | 3286 | 2 | 14.50 | − 6.7 |
| 1810 | 2 | 15.35 | − 7.6 | 2790 | 2 | 14.00 | −10.0 | 3319 | 2 | 15.08 | − 5.8 |
| 1864 | 2 | 13.82 | − 9.2 | 2814 | 2 | 14.33 | − 7.0 | 3320 | 2 | 14.55 | − 7.4 |
| 1940 | 2 | 14.01 | − 8.7 | 2815 | 2 | 15.27 | − 9.1 | 3321 | 2 | 14.76 | −10.0 |
| 1991 | 2 | 14.97 | − 9.7 | 2825 | 2 | 13.55 | − 5.3 | 3322 | 2 | 15.40 | − 8.1 |
| 2004 | 2 | 14.34 | − 9.1 | 2826 | 2 | 14.22 | − 8.1 | 3346 | 2 | 15.39 | − 6.8 |
| 2069 | 4 | 14.35 | − 7.7 | 2827 | 2 | 14.61 | − 5.9 | 3355 | 3 | 15.29 | − 6.0 |
| 2075 | 3 | 15.34 | − 7.8 | 2829 | 2 | 14.51 | − 7.9 | 3362 | 4 | 14.69 | − 5.9 |
| 2076 | 3 | 14.63 | − 9.1 | 2843 | 2 | 13.69 | − 6.6 | 3364 | 3 | 14.09 | − 7.9 |
| 2081 | 2 | 13.75 | − 9.8 | 2888 | 3 | 14.92 | − 9.9 | 3365 | 3 | 14.07 | − 5.8 |
| 2082 | 2 | 13.88 | − 8.7 | 2889 | 2 | 14.11 | − 5.2 | 3377 | 3 | 14.72 | − 6.9 |
| 2237 | 2 | 14.46 | − 8.1 | 2898 | 2 | 14.93 | − 8.9 | 3378 | 3 | 14.17 | −10.0 |
| 2238 | 2 | 14.92 | − 8.7 | 2903 | 3 | 14.37 | −10.0 | 3391 | 3 | 14.37 | − 8.6 |
| 2239 | 2 | 14.92 | − 6.2 | 2917 | 2 | 14.19 | − 8.2 | 3392 | 3 | 14.47 | − 7.6 |
| 2285 | 4 | 14.25 | − 7.0 | 2918 | 2 | 14.59 | − 9.4 | 3408 | 3 | 13.92 | −10.0 |
| 2325 | 4 | 14.47 | − 6.3 | 2919 | 2 | 14.29 | − 8.5 | 3419 | 2 | 14.56 | − 8.9 |
| 2338 | 3 | 14.78 | − 9.6 | 2921 | 2 | 14.09 | − 6.8 | 3422 | 2 | 15.08 | − 7.6 |
| 2344 | 2 | 15.58 | − 8.7 | 2922 | 2 | 14.39 | − 6.2 | 3433 | 4 | 14.37 | − 6.0 |
| 2352 | 2 | 14.58 | − 6.6 | 2923 | 2 | 14.39 | − 5.7 | 3450 | 2 | 14.47 | − 8.1 |
| 2442 | 4 | 14.29 | − 9.8 | 2927 | 2 | 14.80 | − 6.6 | 3451 | 2 | 14.26 | − 9.0 |
| 2443 | 4 | 14.75 | − 6.5 | 2928 | 2 | 14.60 | − 7.4 | 3453 | 2 | 14.47 | − 6.4 |
| 2468 | 4 | 14.32 | − 9.7 | 2929 | 2 | 14.40 | − 9.2 | 3462 | 3 | 14.59 | − 8.8 |
| 2496 | 5 | 14.37 | − 9.9 | 2946 | 2 | 14.43 | − 5.7 | 3470 | 5 | 14.86 | − 7.3 |
| 2505 | 2 | 13.88 | − 7.0 | 2963 | 2 | 14.44 | − 7.0 | 3487 | 4 | 14.74 | − 5.0 |
| 2527 | 2 | 13.82 | − 9.2 | 2964 | 3 | 13.84 | − 7.9 | 3532 | 4 | 14.34 | − 9.2 |

TABLE II—*Continued*

Zone −5° to −10° —*Continued*

| Number | Days | Diurnal Motion Sidereal | Heliographic Latitude | Number | Days | Diurnal Motion Sidereal | Heliographic Latitude | Number | Days | Diurnal Motion Sidereal | Heliographic Latitude |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 3535..... | 3 | 15°.35 | − 9°.9 | 3648..... | 2 | 14°.66 | − 9°.9 | 3732..... | 3 | 14°.90 | − 8°.6 |
| 3536..... | 2 | 14.62 | − 7.8 | 3657..... | 2 | 13.97 | − 7.9 | 3760..... | 3 | 14.18 | − 7.7 |
| 3537..... | 2 | 14.51 | − 7.6 | 3663..... | 7 | 14.38 | − 6.7 | 3761..... | 3 | 14.84 | − 7.6 |
| 3540..... | 4 | 14.50 | − 8.0 | 3678..... | 2 | 14.67 | − 8.1 | 3762..... | 3 | 14.64 | − 7.7 |
| 3547..... | 3 | 14.32 | − 7.1 | 3680..... | 3 | 14.96 | − 8.4 | 3763..... | 3 | 14.08 | − 8.0 |
| 3554..... | 2 | 14.94 | − 5.5 | 3681..... | 3 | 14.29 | − 6.2 | 3767..... | 5 | 14.42 | − 5.8 |
| 3556..... | 5 | 14.47 | − 5.3 | 3682..... | 3 | 14.33 | − 6.1 | 3772..... | 3 | 14.99 | − 6.9 |
| 3561..... | 2 | 14.12 | − 9.7 | 3683..... | 3 | 14.39 | − 8.9 | 3778..... | 3 | 14.87 | − 9.6 |
| 3570..... | 4 | 14.09 | − 7.6 | 3692..... | 3 | 15.02 | − 9.8 | 3783..... | 2 | 15.46 | − 5.2 |
| 3572..... | 2 | 14.79 | − 8.0 | 3701..... | 2 | 16.03 | − 7.1 | 3794..... | 2 | 14.75 | − 9.0 |
| 3574..... | 3 | 15.53 | − 8.9 | 3705..... | 3 | 14.70 | − 7.4 | 3797..... | 2 | 14.87 | − 6.8 |
| 3608..... | 2 | 14.18 | − 5.4 | 3708..... | 3 | 14.55 | − 7.2 | 3808..... | 2 | 14.67 | − 8.9 |
| 3629..... | 2 | 14.16 | − 7.8 | 3709..... | 3 | 14.75 | − 8.5 | | | | |
| 3630..... | 2 | 14.35 | − 8.6 | 3715..... | 4 | 14.18 | − 8.9 | | | | |

TABLE II—*Continued*

Zone 10° to 15° { Mean Latitude = +12°.49
Mean Diurnal Motion = 14°.33

| Number | Days | Diurnal Motion Sidereal | Heliographic Latitude | Number | Days | Diurnal Motion Sidereal | Heliographic Latitude | Number | Days | Diurnal Motion Sidereal | Heliographic Latitude |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 40 | 2 | 15°.24 | 12°.8 | 665 | 3 | 14°.64 | 14°.2 | 1085 | 3 | 14°.10 | 11°.5 |
| 41 | 2 | 15.24 | 13.2 | 669 | 7 | 14.10 | 10.2 | 1086 | 4 | 14.35 | 11.3 |
| 58 | 2 | 15.14 | 14.9 | 672 | 2 | 14.56 | 10.4 | 1097 | 3 | 14.80 | 11.7 |
| 98 | 3 | 14.55 | 12.1 | 673 | 2 | 14.18 | 12.3 | 1098 | 2 | 14.47 | 12.1 |
| 143 | 3 | 14.69 | 14.6 | 674 | 2 | 14.28 | 13.9 | 1102 | 4 | 14.11 | 11.5 |
| 165 | 2 | 14.88 | 10.4 | 683 | 2 | 14.85 | 14.1 | 1103 | 4 | 14.30 | 14.7 |
| 167 | 2 | 13.96 | 14.0 | 684 | 2 | 14.66 | 11.9 | 1126 | 3 | 14.40 | 10.9 |
| 173 | 3 | 15.08 | 12.0 | 686 | 2 | 14.24 | 12.5 | 1135 | 2 | 14.87 | 11.4 |
| 17 | 2 | 14.97 | 11.4 | 688 | 2 | 14.88 | 13.5 | 1136 | 2 | 14.07 | 13.1 |
| 18 | 3 | 14.60 | 12.9 | 715 | 3 | 14.47 | 10.1 | 1137 | 2 | 14.37 | 14.2 |
| 19 | 3 | 14.60 | 14.6 | 718 | 3 | 13.76 | 14.5 | 1150 | 2 | 13.87 | 13.9 |
| 191 | 2 | 13.96 | 12.7 | 720 | 2 | 14.34 | 14.4 | 1151 | 2 | 14.47 | 11.2 |
| 194 | 2 | 14.70 | 15.0 | 743 | 2 | 14.29 | 14.6 | 1152 | 2 | 14.37 | 13.3 |
| 196 | 2 | 14.20 | 14.1 | 752 | 2 | 14.39 | 14.4 | 1170 | 2 | 15.57 | 12.4 |
| 209 | 2 | 14.70 | 13.1 | 771 | 2 | 13.93 | 14.2 | 1174 | 2 | 14.52 | 13.9 |
| 212 | 2 | 13.46 | 15.0 | 772 | 2 | 14.74 | 13.5 | 1190 | 5 | 14.52 | 11.9 |
| 213 | 2 | 14.33 | 13.0 | 773 | 2 | 14.13 | 12.7 | 1193 | 3 | 13.89 | 12.1 |
| 214 | 2 | 14.33 | 10.4 | 789 | 2 | 13.93 | 12.3 | 1199 | 3 | 13.74 | 14.2 |
| 227 | 3 | 14.73 | 11.7 | 797 | 2 | 14.66 | 13.0 | 1207 | 3 | 14.02 | 14.6 |
| 252 | 5 | 13.90 | 12.4 | 800 | 2 | 14.05 | 11.2 | 1211 | 2 | 14.65 | 14.2 |
| 267 | 7 | 14.41 | 10.5 | 805 | 2 | 15.69 | 12.0 | 1245 | 3 | 13.69 | 13.8 |
| 268 | 2 | 12.74 | 11.3 | 808 | 4 | 14.34 | 12.6 | 1250 | 4 | 14.53 | 13.0 |
| 269 | 2 | 13.98 | 11.9 | 827 | 4 | 14.36 | 10.4 | 1305 | 3 | 14.79 | 12.0 |
| 273 | 4 | 14.55 | 10.9 | 830 | 2 | 12.60 | 12.0 | 1320 | 4 | 14.29 | 13.8 |
| 286 | 7 | 13.95 | 13.0 | 831 | 2 | 13.83 | 12.4 | 1321 | 3 | 14.23 | 12.6 |
| 298 | 2 | 14.08 | 14.6 | 845 | 2 | 14.68 | 12.9 | 1324 | 3 | 14.44 | 13.1 |
| 304 | 2 | 13.97 | 10.9 | 846 | 3 | 13.95 | 13.8 | 1325 | 4 | 14.24 | 11.7 |
| 306 | 2 | 13.54 | 12.5 | 851 | 3 | 14.78 | 13.1 | 1329 | 4 | 14.56 | 10.9 |
| 307 | 2 | 13.76 | 11.2 | 858 | 3 | 14.25 | 10.3 | 1336 | 3 | 13.97 | 12.6 |
| 313 | 2 | 14.84 | 13.9 | 859 | 3 | 14.55 | 11.2 | 1337 | 3 | 14.27 | 12.7 |
| 327 | 2 | 14.26 | 13.1 | 860 | 4 | 14.59 | 11.2 | 1340 | 3 | 14.17 | 10.2 |
| 338 | 2 | 14.48 | 12.5 | 871 | 2 | 14.08 | 10.9 | 1342 | 2 | 14.24 | 12.8 |
| 343 | 2 | 14.13 | 14.4 | 872 | 3 | 14.21 | 13.3 | 1348 | 7 | 14.26 | 13.9 |
| 344 | 2 | 14.37 | 14.6 | 875 | 2 | 14.67 | 10.7 | 1349 | 7 | 14.20 | 10.1 |
| 345 | 2 | 14.92 | 13.2 | 876 | 2 | 14.88 | 12.0 | 1350 | 7 | 14.55 | 14.9 |
| 350 | 2 | 14.37 | 14.0 | 890 | 3 | 14.14 | 11.6 | 1356 | 6 | 14.40 | 12.3 |
| 361 | 4 | 14.46 | 11.0 | 891 | 3 | 14.44 | 13.9 | 1410 | 2 | 14.61 | 11.1 |
| 363 | 2 | 13.79 | 11.4 | 911 | 2 | 14.53 | 12.1 | 1414 | 2 | 13.53 | 12.3 |
| 364 | 2 | 14.12 | 12.6 | 912 | 2 | 13.53 | 13.7 | 1416 | 3 | 13.27 | 12.4 |
| 371 | 3 | 14.94 | 14.3 | 933 | 2 | 15.73 | 14.8 | 1417 | 3 | 14.04 | 14.9 |
| 385 | 2 | 13.58 | 13.5 | 934 | 2 | 14.73 | 14.0 | 1439 | 2 | 13.90 | 10.2 |
| 387 | 3 | 13.94 | 10.3 | 958 | 2 | 14.55 | 10.8 | 1442 | 3 | 14.18 | 10.8 |
| 398 | 2 | 14.44 | 14.0 | 959 | 2 | 13.65 | 13.7 | 1443 | 2 | 14.27 | 11.4 |
| 400 | 2 | 14.16 | 14.1 | 961 | 3 | 13.72 | 11.2 | 1445 | 2 | 14.18 | 10.9 |
| 409 | 3 | 14.02 | 11.8 | 963 | 3 | 13.87 | 14.2 | 1446 | 2 | 14.08 | 10.3 |
| 425 | 2 | 14.01 | 15.0 | 968 | 3 | 13.77 | 10.4 | 1447 | 2 | 14.55 | 13.5 |
| 439 | 2 | 13.13 | 14.2 | 969 | 3 | 13.87 | 14.3 | 1450 | 2 | 13.81 | 12.2 |
| 448 | 2 | 14.90 | 13.9 | 974 | 3 | 14.22 | 12.5 | 1454 | 2 | 13.16 | 10.2 |
| 473 | 3 | 14.69 | 14.3 | 983 | 3 | 13.77 | 12.1 | 1502 | 3 | 14.47 | 11.9 |
| 482 | 3 | 14.44 | 12.2 | 984 | 2 | 14.25 | 11.7 | 1503 | 3 | 14.67 | 14.1 |
| 483 | 2 | 14.86 | 10.4 | 985 | 3 | 14.37 | 11.9 | 1504 | 3 | 13.60 | 13.2 |
| 506 | 2 | 14.73 | 12.4 | 987 | 3 | 13.62 | 14.1 | 1511 | 2 | 15.04 | 14.6 |
| 511 | 2 | 14.84 | 12.0 | 993 | 2 | 14.20 | 13.2 | 1519 | 2 | 13.65 | 12.8 |
| 513 | 2 | 14.31 | 14.8 | 996 | 2 | 13.70 | 10.7 | 1522 | 2 | 14.31 | 10.4 |
| 515 | 2 | 14.31 | 14.5 | 1001 | 2 | 14.50 | 11.1 | 1523 | 2 | 14.22 | 14.1 |
| 516 | 2 | 14.84 | 12.1 | 1002 | 2 | 13.50 | 14.0 | 1524 | 2 | 14.78 | 15.0 |
| 517 | 2 | 14.10 | 13.7 | 1005 | 3 | 14.68 | 12.4 | 1526 | 2 | 13.65 | 13.3 |
| 518 | 2 | 14.84 | 11.5 | 1030 | 2 | 14.52 | 10.0 | 1527 | 2 | 14.12 | 13.6 |
| 537 | 2 | 14.01 | 13.9 | 1033 | 3 | 14.42 | 11.9 | 1533 | 2 | 13.94 | 12.0 |
| 538 | 2 | 14.23 | 14.0 | 1034 | 2 | 15.02 | 11.0 | 1534 | 2 | 14.15 | 12.6 |
| 598 | 2 | 13.19 | 11.4 | 1035 | 3 | 14.52 | 10.5 | 1540 | 2 | 14.45 | 14.6 |
| 622 | 3 | 14.59 | 14.9 | 1036 | 3 | 14.42 | 11.6 | 1544 | 3 | 13.58 | 12.5 |
| 638 | 2 | 14.04 | 13.2 | 1037 | 3 | 14.22 | 10.7 | 1545 | 2 | 13.76 | 13.0 |
| 639 | 2 | 14.81 | 14.8 | 1046 | 3 | 13.83 | 14.5 | 1547 | 3 | 14.13 | 12.3 |
| 648 | 3 | 14.42 | 11.6 | 1049 | 2 | 13.81 | 14.3 | 1549 | 2 | 14.64 | 13.3 |
| 649 | 3 | 14.91 | 11.9 | 1067 | 2 | 14.72 | 11.2 | 1550 | 2 | 14.64 | 15.0 |
| 661 | 3 | 14.43 | 10.7 | 1070 | 2 | 14.23 | 14.6 | 1556 | 2 | 13.66 | 12.3 |
| 662 | 3 | 14.38 | 11.8 | | | | | 1557 | 2 | 14.55 | 12.7 |

TABLE II—*Continued*

Zone 10° to 15°—*Continued*

| Number | Days | Diurnal Motion Sidereal | Helio-graphic Latitude | Number | Days | Diurnal Motion Sidereal | Helio-graphic Latitude | Number | Days | Diurnal Motion Sidereal | Helio-graphic Latitude |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1558 | 2 | 14°.64 | 10°.1 | 2151 | 2 | 14°.73 | 12°.3 | 2675 | 3 | 14°.48 | 13°.8 |
| 1559 | 5 | 14.11 | 14.5 | 2156 | 2 | 13.72 | 11.3 | 2695 | 2 | 14.59 | 10.7 |
| 1560 | 3 | 14.82 | 14.3 | 2158 | 2 | 13.59 | 10.4 | 2697 | 2 | 14.38 | 11.0 |
| 1561 | 5 | 14.13 | 12.2 | 2159 | 2 | 13.72 | 11.4 | 2706 | 2 | 14.41 | 12.6 |
| 1562 | 3 | 14.08 | 11.2 | 2160 | 2 | 13.97 | 13.7 | 2727 | 2 | 14.11 | 13.4 |
| 1565 | 3 | 14.37 | 13.5 | 2163 | 2 | 14.99 | 14.8 | 2728 | 4 | 14.01 | 14.4 |
| 1589 | 2 | 13.95 | 13.9 | 2165 | 2 | 15.20 | 12.6 | 2747 | 4 | 14.06 | 14.5 |
| 1598 | 4 | 14.29 | 11.2 | 2166 | 2 | 14.79 | 12.7 | 2765 | 3 | 14.47 | 10.5 |
| 1600 | 2 | 14.70 | 12.8 | 2170 | 2 | 14.89 | 15.0 | 2767 | 3 | 14.78 | 12.0 |
| 1609 | 5 | 14.50 | 11.6 | 2171 | 2 | 13.91 | 14.9 | 2772 | 3 | 14.83 | 13.0 |
| 1604′ | 3 | 13.86 | 13.2 | 2172 | 4 | 14.06 | 12.2 | 2773 | 3 | 14.78 | 10.9 |
| 1622 | 3 | 14.19 | 12.2 | 2190 | 2 | 15.30 | 11.3 | 2784 | 2 | 14.92 | 11.6 |
| 1623 | 3 | 13.79 | 14.6 | 2191 | 2 | 14.99 | 10.6 | 2793 | 3 | 14.26 | 14.2 |
| 1627 | 3 | 13.81 | 11.2 | 2192 | 2 | 14.09 | 11.5 | 2791 | 2 | 15.11 | 11.7 |
| 1634 | 3 | 14.35 | 14.6 | 2215 | 2 | 15.47 | 14.6 | 2795 | 3 | 14.52 | 11.3 |
| 1635 | 3 | 14.40 | 13.5 | 2217 | 2 | 13.90 | 12.9 | 2801 | 3 | 14.47 | 10.0 |
| 1638 | 3 | 14.55 | 12.6 | 2221 | 2 | 15.10 | 12.7 | 2803 | 2 | 14.50 | 12.6 |
| 1645 | 2 | 14.33 | 12.0 | 2226 | 2 | 14.92 | 10.6 | 2804 | 3 | 14.62 | 10.0 |
| 1669 | 2 | 15.17 | 12.4 | 2252 | 2 | 13.65 | 12.2 | 2806 | 3 | 14.88 | 10.0 |
| 1670 | 2 | 14.44 | 11.2 | 2253 | 2 | 13.35 | 11.1 | 2809 | 2 | 14.96 | 10.6 |
| 1672 | 3 | 14.09 | 14.2 | 2255 | 4 | 14.28 | 11.1 | 2819 | 2 | 14.12 | 13.6 |
| 1679 | 3 | 14.24 | 13.0 | 2256 | 4 | 14.59 | 13.5 | 2820 | 2 | 14.41 | 14.9 |
| 1680 | 3 | 13.88 | 14.2 | 2258 | 2 | 14.01 | 14.0 | 2835 | 2 | 14.42 | 11.9 |
| 1696 | 2 | 13.82 | 13.5 | 2259 | 2 | 13.55 | 11.2 | 2836 | 2 | 14.01 | 12.1 |
| 1722 | 2 | 13.45 | 12.9 | 2289 | 6 | 14.20 | 13.6 | 2844 | 2 | 14.63 | 10.8 |
| 1723 | 2 | 13.65 | 14.2 | 2291 | 6 | 14.26 | 14.3 | 2845 | 2 | 14.42 | 12.2 |
| 1739 | 2 | 14.09 | 10.5 | 2293 | 6 | 14.18 | 13.0 | 2848 | 2 | 15.15 | 10.3 |
| 1740 | 2 | 14.19 | 11.9 | 2294 | 2 | 14.04 | 10.1 | 2851 | 2 | 14.42 | 11.6 |
| 1771 | 2 | 13.79 | 12.4 | 2295 | 2 | 14.24 | 11.9 | 2856 | 2 | 15.21 | 10.3 |
| 1795 | 2 | 14.49 | 10.0 | 2302 | 3 | 14.15 | 10.8 | 2858 | 3 | 14.33 | 11.5 |
| 1801 | 2 | 12.94 | 13.5 | 2254 | 3 | 14.54 | 11.4 | 2859 | 3 | 14.77 | 13.3 |
| 1802 | 2 | 14.14 | 10.1 | 2331 | 2 | 15.21 | 14.4 | 2860 | 3 | 13.78 | 11.9 |
| 1803 | 2 | 15.05 | 11.2 | 2332 | 2 | 13.72 | 15.0 | 2866 | 3 | 14.33 | 13.3 |
| 1807 | 2 | 14.34 | 15.0 | 2333 | 2 | 14.31 | 14.4 | 2870 | 3 | 14.28 | 10.9 |
| 1813 | 2 | 14.24 | 14.1 | 2366 | 3 | 13.74 | 14.0 | 2871 | 2 | 14.61 | 13.0 |
| 1831 | 2 | 14.34 | 10.2 | 2378 | 2 | 14.44 | 13.6 | 2874 | 2 | 14.71 | 14.0 |
| 1841 | 2 | 14.95 | 12.5 | 2383 | 2 | 14.97 | 10.9 | 2875 | 2 | 14.71 | 12.2 |
| 1851 | 2 | 14.44 | 10.7 | 2390 | 2 | 14.55 | 11.2 | 2894 | 2 | 14.63 | 12.0 |
| 1855 | 2 | 14.24 | 13.9 | 2391 | 2 | 14.65 | 10.7 | 2895 | 2 | 13.75 | 12.1 |
| 1905 | 2 | 14.46 | 11.0 | 2397 | 2 | 13.92 | 12.4 | 2896 | 2 | 14.54 | 11.9 |
| 1907 | 2 | 14.46 | 14.7 | 2398 | 2 | 14.13 | 11.3 | 2899 | 4 | 14.47 | 10.8 |
| 1912 | 2 | 14.65 | 10.8 | 2403 | 2 | 14.09 | 12.2 | 2902 | 2 | 13.95 | 11.4 |
| 1916 | 2 | 13.51 | 11.5 | 2101 | 2 | 14.59 | 14.8 | 2950 | 2 | 14.18 | 10.5 |
| 1919 | 2 | 15.31 | 12.2 | 2423 | 2 | 14.09 | 14.0 | 2954 | 3 | 13.99 | 12.9 |
| 1920 | 2 | 13.89 | 10.1 | 2162 | 2 | 13.96 | 13.0 | 2959 | 3 | 14.24 | 12.2 |
| 1921 | 2 | 14.93 | 13.9 | 2463 | 2 | 13.27 | 14.7 | 2973 | 3 | 14.81 | 11.9 |
| 1925 | 2 | 14.08 | 14.8 | 2464 | 4 | 14.49 | 13.1 | 2978 | 2 | 14.23 | 10.4 |
| 1952 | 2 | 13.91 | 14.0 | 2465 | 4 | 13.71 | 14.2 | 3014 | 2 | 13.85 | 10.2 |
| 1955 | 2 | 14.11 | 14.4 | 2482 | 2 | 14.75 | 12.7 | 3016 | 3 | 14.80 | 10.7 |
| 1956 | 2 | 14.62 | 12.4 | 2483 | 2 | 14.58 | 12.9 | 3023 | 2 | 14.92 | 10.1 |
| 1957 | 2 | 15.02 | 10.8 | 2509 | 5 | 14.59 | 11.8 | 3027 | 2 | 14.98 | 11.4 |
| 1959 | 2 | 14.01 | 14.5 | 2510 | 7 | 14.40 | 11.1 | 3030 | 2 | 14.78 | 13.2 |
| 1960 | 2 | 14.62 | 12.0 | 2513 | 4 | 14.63 | 13.1 | 3031 | 2 | 13.49 | 12.4 |
| 1981 | 2 | 14.36 | 14.2 | 2516 | 2 | 14.98 | 10.0 | 3032 | 2 | 13.49 | 12.6 |
| 1984 | 3 | 14.20 | 13.1 | 2539 | 3 | 13.65 | 11.6 | 3040 | 2 | 15.80 | 12.9 |
| 2015 | 2 | 15.10 | 10.4 | 2553 | 4 | 14.20 | 12.9 | 3041 | 2 | 15.05 | 12.5 |
| 2025 | 5 | 14.18 | 11.5 | 2554 | 2 | 13.94 | 14.3 | 3042 | 2 | 13.77 | 10.5 |
| 2027 | 5 | 14.28 | 11.9 | 2568 | 4 | 14.25 | 12.7 | 3044 | 2 | 13.98 | 11.0 |
| 2034 | 4 | 14.68 | 11.5 | 2569 | 3 | 14.32 | 14.2 | 3045 | 2 | 14.84 | 12.5 |
| 2038 | 3 | 14.65 | 14.2 | 2573 | 2 | 14.50 | 10.8 | 3047 | 2 | 13.98 | 10.3 |
| 2041 | 3 | 14.26 | 11.8 | 2574 | 3 | 14.17 | 13.4 | 3054 | 2 | 13.94 | 10.8 |
| 2055 | 4 | 14.45 | 10.7 | 2576 | 2 | 14.38 | 13.2 | 3107 | 3 | 14.63 | 11.6 |
| 2056 | 4 | 14.48 | 11.8 | 2582 | 3 | 14.25 | 13.9 | 3108 | 3 | 14.95 | 14.1 |
| 2058 | 2 | 14.28 | 13.7 | 2588 | 2 | 15.14 | 11.3 | 3109 | 2 | 14.72 | 13.5 |
| 2064 | 4 | 14.14 | 12.3 | 2589 | 2 | 14.83 | 11.9 | 3112 | 2 | 14.82 | 14.7 |
| 2077 | 3 | 14.28 | 14.2 | 2613 | 3 | 15.07 | 11.9 | 3113 | 4 | 14.52 | 13.4 |
| 2118 | 3 | 13.90 | 10.9 | 2653 | 4 | 14.70 | 10.8 | 3116 | 3 | 14.33 | 13.5 |
| 2136 | 2 | 14.01 | 14.8 | 2665 | 4 | 14.01 | 14.7 | 3117 | 3 | 14.39 | 10.8 |

TABLE II—*Continued*

Zone 10° to 15°—*Continued*

| Number | Days | Diurnal Motion Sidereal | Heliographic Latitude | Number | Days | Diurnal Motion Sidereal | Heliographic Latitude | Number | Days | Diurnal Motion Sidereal | Heliographic Latitude |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 3118 | 3 | 14°.78 | 11°.5 | 3345 | 3 | 14°.73 | 10°.1 | 3587 | 2 | 14°.08 | 10°.6 |
| 3119 | 3 | 14.53 | 11.8 | 3351′ | 2 | 13.92 | 13.7 | 3588 | 2 | 13.88 | 12.1 |
| 3127 | 2 | 14.68 | 11.1 | 3358′ | 2 | 13.82 | 13.8 | 3595 | 2 | 15.09 | 13.9 |
| 3128 | 2 | 14.56 | 15.0 | 3359′ | 2 | 14.65 | 10.0 | 3599 | 2 | 14.18 | 13.2 |
| 3129 | 2 | 14.33 | 14.6 | 3369 | 6 | 14.29 | 13.6 | 3603 | 2 | 14.68 | 12.7 |
| 3134 | 2 | 14.09 | 13.5 | 3366 | 3 | 14.32 | 11.2 | 3606 | 2 | 15.09 | 13.1 |
| 3135 | 2 | 14.09 | 10.6 | 3367 | 3 | 15.41 | 11.8 | 3612 | 2 | 13.86 | 13.1 |
| 3176 | 2 | 14.88 | 11.2 | 3368 | 3 | 14.52 | 12.9 | 3613 | 2 | 14.06 | 14.4 |
| 3198 | 6 | 14.98 | 12.9 | 3398 | 5 | 14.56 | 14.6 | 3615 | 2 | 14.06 | 12.4 |
| 3210 | 4 | 13.94 | 14.6 | 3399 | 2 | 14.88 | 12.2 | 3616 | 2 | 14.75 | 13.5 |
| 3212 | 4 | 14.62 | 10.7 | 3431 | 2 | 14.06 | 10.2 | 3617 | 2 | 14.16 | 10.8 |
| 3218 | 2 | 14.89 | 13.3 | 3432 | 3 | 14.10 | 12.6 | 3635 | 2 | 13.66 | 11.2 |
| 3221 | 2 | 14.25 | 10.6 | 3438 | 2 | 14.33 | 10.6 | 3669 | 6 | 14.04 | 12.9 |
| 3224 | 3 | 13.85 | 12.3 | 3441 | 3 | 14.33 | 10.5 | 3672 | 4 | 14.55 | 14.9 |
| 3225 | 3 | 13.99 | 14.0 | 3445 | 2 | 14.37 | 14.6 | 3673 | 3 | 14.34 | 14.9 |
| 3227 | 3 | 14.74 | 11.5 | 3477 | 3 | 14.53 | 11.1 | 3674 | 5 | 14.40 | 12.4 |
| 3256 | 2 | 13.94 | 14.7 | 3478 | 3 | 14.17 | 11.6 | 3731 | 4 | 15.08 | 11.1 |
| 3260 | 2 | 14.07 | 14.8 | 3479 | 2 | 14.24 | 11.2 | 3738 | 4 | 14.18 | 11.2 |
| 3263 | 2 | 13.81 | 10.4 | 3480 | 2 | 14.46 | 13.1 | 3752 | 2 | 14.49 | 10.8 |
| 3264 | 2 | 14.07 | 12.4 | 3498 | 2 | 14.68 | 11.1 | 3755 | 2 | 13.77 | 10.1 |
| 3273 | 2 | 14.50 | 11.6 | 3499 | 3 | 14.47 | 10.1 | 3771 | 3 | 14.38 | 13.8 |
| 3274 | 2 | 13.95 | 13.6 | 3500 | 3 | 14.22 | 11.5 | 3775 | 3 | 14.72 | 14.3 |
| 3275 | 2 | 14.77 | 11.7 | 3510 | 2 | 14.66 | 12.9 | 3776 | 3 | 14.41 | 12.6 |
| 3276 | 2 | 14.04 | 10.4 | 3567 | 2 | 14.12 | 10.4 | 3787 | 2 | 14.55 | 13.4 |
| 3277 | 2 | 14.04 | 12.0 | 3568 | 2 | 13.83 | 12.4 | 3788 | 2 | 14.55 | 13.9 |
| 3278 | 2 | 14.68 | 10.8 | 3578 | 3 | 14.11 | 11.8 | 3790 | 2 | 14.25 | 14.8 |
| 3279 | 2 | 14.22 | 14.9 | 3581 | 2 | 13.98 | 13.2 | 3796 | 2 | 14.35 | 13.2 |
| 3281 | 2 | 13.68 | 14.3 | 3582 | 2 | 14.18 | 13.6 | 3801 | 2 | 13.88 | 13.2 |
| 3282 | 2 | 14.41 | 10.0 | 3583 | 2 | 14.89 | 12.0 | 3804 | 2 | 13.98 | 13.9 |
| 3342 | 2 | 14.18 | 10.4 | 3584 | 2 | 14.08 | 12.8 | 3806 | 2 | 13.88 | 14.9 |
| 3344 | 3 | 14.84 | 10.4 | 3585 | 2 | 15.29 | 10.0 | | | | |

TABLE II—*Continued*

Zone −10° to −15° { Mean Latitude = −12°.07
Mean Diurnal Motion = 14°.43

| Number | Days | Diurnal Motion Sidereal | Heliographic Latitude | Number | Days | Diurnal Motion Sidereal | Heliographic Latitude | Number | Days | Diurnal Motion Sidereal | Heliographic Latitude |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 177 | 2 | 14°.85 | −11°.9 | 1347 | 2 | 15°.24 | −10°.6 | 2339 | 2 | 14°.26 | −12°.5 |
| 28 | 2 | 14.06 | −12.7 | 1375 | 2 | 14.45 | −13.2 | 2340 | 2 | 14.26 | −13.5 |
| 225 | 5 | 14.19 | −10.2 | 1376 | 4 | 14.45 | −12.8 | 2345 | 3 | 14.37 | −11.9 |
| 230 | 3 | 15.12 | −10.3 | 1407 | 2 | 15.40 | −13.6 | 2375 | 2 | 14.55 | −12.9 |
| 233 | 2 | 13.94 | −14.4 | 1430 | 3 | 13.89 | −12.1 | 2376 | 2 | 14.55 | −13.1 |
| 234 | 2 | 14.76 | −12.8 | 1469 | 3 | 14.86 | −12.9 | 2408 | 2 | 14.09 | −14.6 |
| 237 | 3 | 14.54 | −14.2 | 1471 | 3 | 14.09 | −12.3 | 2411 | 2 | 14.29 | −13.6 |
| 240 | 3 | 14.59 | −14.3 | 1472 | 3 | 14.71 | −14.8 | 2412 | 2 | 13.58 | −12.9 |
| 248 | 5 | 14.00 | −13.4 | 1476 | 3 | 14.95 | −15.0 | 2422 | 2 | 13.78 | −12.0 |
| 282 | 3 | 14.28 | −12.2 | 1477 | 3 | 14.86 | −14.5 | 2427 | 2 | 14.96 | −13.0 |
| 351 | 2 | 14.13 | −14.3 | 1478 | 3 | 14.67 | −11.4 | 2432 | 2 | 14.26 | −14.3 |
| 380 | 5 | 14.33 | −14.0 | 1486 | 2 | 13.75 | −11.9 | 2456 | 4 | 14.54 | −10.5 |
| 381 | 2 | 12.93 | −11.6 | 1487 | 3 | 14.43 | −12.3 | 2457 | 4 | 14.43 | −14.6 |
| 382 | 5 | 14.36 | −11.5 | 1495 | 2 | 13.85 | −11.0 | 2459 | 4 | 14.03 | −14.7 |
| 401 | 3 | 14.76 | −14.6 | 1496 | 2 | 14.04 | −10.7 | 2469 | 4 | 13.95 | −11.0 |
| 403 | 2 | 14.44 | −11.2 | 1513 | 3 | 14.43 | −14.7 | 2492 | 2 | 14.65 | −13.4 |
| 412 | 3 | 14.32 | −13.4 | 1517 | 2 | 14.31 | −11.7 | 2493 | 2 | 15.17 | −10.9 |
| 413 | 2 | 14.81 | −13.8 | 1573 | 2 | 14.55 | −11.9 | 2495 | 3 | 14.51 | −12.5 |
| 415 | 3 | 14.37 | −12.7 | 1584 | 2 | 14.25 | −14.5 | 2497 | 3 | 14.77 | −15.0 |
| 486 | 3 | 14.39 | −12.3 | 1585 | 2 | 14.74 | −13.6 | 2506 | 2 | 13.88 | −12.8 |
| 522 | 2 | 14.42 | −14.0 | 1599 | 2 | 14.99 | −11.0 | 2524 | 6 | 14.04 | −11.9 |
| 523 | 2 | 14.84 | −14.6 | 1610 | 7 | 14.35 | −14.6 | 2526 | 2 | 13.92 | −13.5 |
| 524 | 2 | 14.84 | −12.5 | 1616 | 3 | 13.54 | −15.0 | 2531 | 6 | 14.18 | −10.8 |
| 525 | 2 | 14.31 | −13.4 | 1626 | 3 | 14.25 | −12.6 | 2536 | 3 | 14.18 | −13.0 |
| 562 | 2 | 14.01 | −15.0 | 1660 | 2 | 15.72 | −13.4 | 2542 | 3 | 15.00 | −11.4 |
| 572 | 2 | 14.01 | −10.0 | 1661 | 2 | 15.13 | −12.8 | 2543 | 4 | 13.93 | −10.9 |
| 585 | 2 | 14.68 | −10.0 | 1713 | 3 | 13.89 | −13.7 | 2545 | 4 | 14.85 | −13.0 |
| 589 | 2 | 14.79 | −14.7 | 1750 | 2 | 13.99 | −14.2 | 2546 | 2 | 14.66 | −11.0 |
| 594 | 2 | 14.68 | −14.9 | 1751 | 2 | 14.39 | −12.6 | 2547 | 2 | 14.55 | −12.9 |
| 694 | 4 | 14.42 | −12.0 | 1781 | 2 | 14.78 | −13.2 | 2548 | 2 | 14.55 | −12.5 |
| 695 | 2 | 14.02 | −14.8 | 1811 | 2 | 14.24 | −11.9 | 2557 | 4 | 15.04 | −10.2 |
| 696 | 2 | 14.66 | −12.0 | 1859 | 2 | 14.43 | −14.1 | 2563 | 2 | 15.38 | −12.5 |
| 697 | 2 | 13.81 | −14.0 | 1860 | 2 | 14.23 | −12.9 | 2579 | 2 | 14.61 | −12.0 |
| 698 | 2 | 14.66 | −10.9 | 1861 | 2 | 14.02 | −11.2 | 2583 | 3 | 14.49 | −10.8 |
| 704 | 2 | 14.02 | −11.2 | 1862 | 2 | 13.62 | −10.2 | 2604 | 2 | 14.12 | −12.1 |
| 707 | 2 | 13.70 | −13.5 | 1863 | 2 | 14.84 | −13.6 | 2605 | 3 | 14.41 | −13.0 |
| 727 | 2 | 14.24 | −14.6 | 1865 | 2 | 14.64 | −10.7 | 2606 | 3 | 14.65 | −14.8 |
| 737 | 2 | 14.39 | −13.5 | 1891 | 2 | 14.74 | −14.1 | 2608 | 3 | 14.82 | −14.2 |
| 738 | 2 | 14.39 | −10.9 | 1900 | 2 | 14.93 | −10.9 | 2626 | 2 | 15.17 | −13.4 |
| 812 | 3 | 13.90 | −15.0 | 1985 | 3 | 14.34 | −11.9 | 2627 | 2 | 15.72 | −10.9 |
| 815 | 2 | 14.48 | −12.8 | 1992 | 2 | 14.46 | −14.6 | 2629 | 2 | 14.73 | −10.8 |
| 816 | 2 | 14.48 | −12.2 | 2018 | 2 | 14.68 | −11.7 | 2632 | 2 | 13.63 | −10.9 |
| 817 | 2 | 14.68 | −10.6 | 2026 | 2 | 15.20 | −13.9 | 2633 | 2 | 14.51 | −10.6 |
| 873 | 2 | 14.58 | −13.3 | 2078 | 2 | 15.03 | −11.8 | 2648 | 3 | 14.92 | −12.1 |
| 897 | 3 | 13.67 | −10.9 | 2079 | 3 | 14.29 | −13.3 | 2652 | 2 | 14.53 | −14.8 |
| 954 | 2 | 13.45 | −14.7 | 2080 | 2 | 14.01 | −11.4 | 2677 | 2 | 14.60 | −13.9 |
| 1003 | 2 | 13.30 | −14.6 | 2092 | 2 | 14.01 | −14.9 | 2681 | 4 | 14.35 | −11.0 |
| 1055 | 3 | 14.62 | −14.0 | 2095 | 2 | 14.77 | −13.9 | 2683 | 2 | 14.40 | −12.2 |
| 1056 | 3 | 14.82 | −10.2 | 2102 | 4 | 14.70 | −13.7 | 2690 | 3 | 14.64 | −11.5 |
| 1061 | 3 | 14.60 | −11.7 | 2108 | 2 | 13.24 | −11.9 | 2691 | 3 | 14.27 | −13.6 |
| 1062 | 3 | 14.62 | −10.5 | 2109 | 3 | 14.19 | −14.3 | 2693 | 3 | 14.74 | −14.1 |
| 1063 | 3 | 14.52 | −12.5 | 2143 | 3 | 14.57 | −14.6 | 2710 | 2 | 14.14 | −13.3 |
| 1078 | 2 | 12.87 | −13.4 | 2152 | 2 | 14.73 | −10.2 | 2711 | 2 | 14.77 | −14.4 |
| 1079 | 2 | 14.04 | −11.5 | 2187 | 2 | 13.87 | −14.2 | 2712 | 6 | 14.43 | −11.8 |
| 1113 | 4 | 14.48 | −14.8 | 2240 | 2 | 14.73 | −12.6 | 2713′ | 2 | 14.59 | −11.7 |
| 1114 | 3 | 13.95 | −12.9 | 2245 | 2 | 13.72 | −13.9 | 2716 | 3 | 14.61 | −12.8 |
| 1146 | 2 | 14.77 | −13.7 | 2278 | 2 | 13.45 | −12.2 | 2718 | 3 | 14.52 | −11.0 |
| 1147 | 2 | 14.37 | −14.4 | 2280 | 4 | 13.75 | −15.0 | 2720 | 3 | 15.02 | −13.9 |
| 1162 | 2 | 13.89 | −13.1 | 2282 | 4 | 14.50 | −14.7 | 2723 | 2 | 14.83 | −13.5 |
| 1164 | 2 | 14.84 | −10.4 | 2286 | 2 | 14.54 | −10.3 | 2737 | 2 | 13.53 | −12.6 |
| 1166 | 2 | 13.78 | −10.6 | 2288 | 2 | 14.93 | −10.5 | 2725′ | 2 | 14.42 | −10.2 |
| 1167 | 2 | 14.73 | −12.1 | 2315 | 6 | 14.41 | −15.0 | 2758 | 3 | 14.88 | −11.3 |
| 1168 | 2 | 15.04 | −10.4 | 2316 | 4 | 14.40 | −11.6 | 2759 | 3 | 14.68 | −13.8 |
| 1230 | 2 | 13.84 | −14.7 | 2324 | 3 | 14.69 | −10.9 | 2760 | 3 | 14.16 | −14.7 |
| 1242 | 2 | 14.95 | −12.8 | 2326 | 2 | 14.61 | −12.5 | 2761 | 3 | 14.52 | −14.2 |
| 1283 | 2 | 13.85 | −13.8 | 2329 | 2 | 14.31 | −11.1 | 2762 | 2 | 14.63 | −11.5 |
| 1288 | 2 | 15.06 | −15.0 | 2335 | 2 | 14.87 | −13.4 | 2763 | 2 | 15.35 | −12.7 |
| 1346 | 7 | 14.32 | −14.0 | 2337 | 3 | 14.88 | −13.7 | 2780 | 2 | 14.31 | −12.3 |

TABLE II—*Continued*

Zone −10° to −15°—*Continued*

| Number | Days | Diurnal Motion Sidereal | Heliographic Latitude | Number | Days | Diurnal Motion Sidereal | Heliographic Latitude | Number | Days | Diurnal Motion Sidereal | Heliographic Latitude |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2781 | 2 | 13°.39 | −14°.3 | 3206 | 5 | 14°.44 | −14°.9 | 3513 | 2 | 13°.46 | −11°.1 |
| 2782 | 2 | 14.41 | −14.8 | 3207 | 2 | 14.01 | −13.3 | 3514 | 3 | 14.70 | −10.7 |
| 2785 | 2 | 14.10 | −10.4 | 3234 | 2 | 14.21 | −15.0 | 3524 | 2 | 14.98 | −13.8 |
| 2786 | 3 | 14.83 | −10.2 | 3247 | 2 | 14.21 | −15.0 | 3525 | 2 | 15.35 | −10.9 |
| 2787 | 3 | 14.21 | −12.6 | 3248 | 2 | 13.42 | −13.5 | 3526 | 3 | 14.65 | −11.2 |
| 2790 | 2 | 14.00 | −10.0 | 3249 | 2 | 13.94 | −10.2 | 3538 | 2 | 14.82 | −14.6 |
| 2805 | 3 | 14.88 | −12.8 | 3250 | 2 | 13.68 | −14.1 | 3539 | 3 | 14.26 | −12.9 |
| 2830 | 2 | 13.74 | −12.7 | 3296 | 2 | 14.55 | −13.1 | 3553′ | 2 | 14.74 | −11.7 |
| 2831 | 2 | 14.32 | −12.2 | 3298 | 2 | 14.23 | −10.2 | 3573 | 2 | 14.79 | −11.8 |
| 2903 | 3 | 14.37 | −10.0 | 3321 | 2 | 14.76 | −10.0 | 3575 | 3 | 14.57 | −14.8 |
| 2904 | 3 | 14.58 | −10.6 | 3327 | 2 | 14.55 | −12.3 | 3576 | 3 | 14.62 | −14.1 |
| 2915 | 2 | 14.59 | −12.1 | 3331 | 3 | 14.94 | −12.4 | 3590 | 2 | 14.48 | −11.0 |
| 2934 | 3 | 14.75 | −10.8 | 3332 | 3 | 14.83 | −14.2 | 3631 | 2 | 15.33 | −14.8 |
| 2935 | 2 | 14.50 | −10.9 | 3333 | 3 | 15.00 | −11.0 | 3639 | 3 | 14.77 | −13.8 |
| 2936 | 2 | 13.00 | −13.4 | 3334 | 3 | 14.51 | −10.6 | 3641 | 6 | 14.71 | −14.7 |
| 2938 | 2 | 14.60 | −10.7 | 3335 | 2 | 14.77 | −11.2 | 3643 | 6 | 14.29 | −10.8 |
| 2944 | 2 | 14.85 | −12.3 | 3336 | 3 | 14.47 | −14.1 | 3652 | 2 | 14.46 | −13.0 |
| 2945 | 2 | 14.60 | −12.2 | 3358 | 3 | 15.21 | −15.0 | 3654 | 4 | 13.98 | −14.4 |
| 2958 | 2 | 13.55 | −14.1 | 3363 | 3 | 14.59 | −13.3 | 3655 | 4 | 14.35 | −13.6 |
| 2962 | 3 | 13.94 | −10.3 | 3361′ | 3 | 13.94 | −13.0 | 3659 | 2 | 14.66 | −14.4 |
| 2966 | 3 | 14.33 | −12.8 | 3363′ | 3 | 14.54 | −13.8 | 3660 | 2 | 13.78 | −14.6 |
| 2975 | 2 | 14.13 | −15.0 | 3348′ | 2 | 13.50 | −13.4 | 3675 | 4 | 14.77 | −12.1 |
| 2976 | 2 | 15.22 | −12.8 | 3349′ | 2 | 14.65 | −14.0 | 3676 | 5 | 14.72 | −10.2 |
| 2981 | 2 | 14.13 | −12.8 | 3350′ | 2 | 13.71 | −10.1 | 3677 | 2 | 14.03 | −10.8 |
| 2986 | 2 | 15.09 | −12.0 | 3382 | 5 | 14.44 | −11.4 | 3684 | 2 | 14.78 | −12.7 |
| 2989 | 2 | 14.21 | −11.2 | 3378 | 3 | 14.17 | −10.0 | 3689 | 2 | 14.35 | −13.3 |
| 2995 | 4 | 14.37 | −13.9 | 3381 | 3 | 14.47 | −14.8 | 3690 | 2 | 14.35 | −10.9 |
| 3010 | 4 | 14.23 | −10.0 | 3383 | 4 | 14.67 | −11.1 | 3691 | 3 | 14.13 | −10.4 |
| 3018 | 3 | 13.77 | −14.9 | 3384 | 3 | 14.72 | −12.5 | 3693 | 4 | 14.58 | −11.6 |
| 3024 | 3 | 14.56 | −12.6 | 3385 | 3 | 14.57 | −13.3 | 3694 | 3 | 14.44 | −14.6 |
| 3026 | 2 | 13.59 | −13.1 | 3389 | 5 | 13.98 | −12.5 | 3695 | 2 | 15.00 | −14.5 |
| 3036 | 2 | 14.68 | −10.1 | 3390 | 2 | 13.27 | −10.5 | 3700 | 2 | 14.93 | −12.8 |
| 3037 | 2 | 13.59 | −13.5 | 3408 | 3 | 13.92 | −10.0 | 3702 | 2 | 14.73 | −14.7 |
| 3079 | 2 | 14.41 | −11.4 | 3409 | 2 | 14.27 | −12.6 | 3706 | 5 | 14.44 | −14.6 |
| 3080 | 2 | 15.64 | −10.7 | 3410 | 2 | 15.24 | −13.8 | 3710 | 6 | 14.62 | −14.6 |
| 3084 | 2 | 14.52 | −11.9 | 3420 | 5 | 14.69 | −10.8 | 3713 | 4 | 14.43 | −13.4 |
| 3093 | 2 | 14.41 | −11.2 | 3421 | 2 | 15.05 | −11.5 | 3714 | 2 | 14.48 | −11.1 |
| 3097 | 3 | 14.64 | −12.0 | 3423 | 4 | 14.41 | −10.9 | 3720 | 6 | 14.21 | −13.2 |
| 3147 | 2 | 13.92 | −14.3 | 3428 | 2 | 14.88 | −12.5 | 3724 | 2 | 15.10 | −14.2 |
| 3156 | 2 | 15.13 | −12.8 | 3430 | 3 | 14.54 | −14.1 | 3725 | 2 | 14.70 | −14.1 |
| 3165 | 2 | 13.99 | −13.1 | 3461 | 3 | 14.78 | −13.3 | 3726 | 2 | 15.10 | −11.3 |
| 3169 | 2 | 13.68 | −13.2 | 3463 | 4 | 14.60 | −12.2 | 3741 | 2 | 14.53 | −12.1 |
| 3172 | 2 | 14.41 | −13.8 | 3466 | 3 | 13.81 | −14.3 | 3768 | 3 | 14.69 | −11.5 |
| 3187 | 2 | 14.18 | −15.0 | 3469 | 2 | 14.85 | −11.7 | 3769 | 3 | 15.19 | −13.0 |
| 3194 | 3 | 14.52 | −14.4 | 3488 | 3 | 14.38 | −14.1 | 3807 | 2 | 13.78 | −10.6 |
| 3195 | 2 | 14.78 | −12.5 | 3489 | 4 | 14.91 | −10.1 | | | | |
| 3196 | 2 | 14.48 | −11.7 | 3505 | 3 | 14.03 | −14.5 | | | | |

TABLE II—*Continued*

Zone 15° to 20° { Mean Latitude = +17°.39
Mean Diurnal Motion = 14°.24

| Number | Days | Diurnal Motion Sidereal | Heliographic Latitude | Number | Days | Diurnal Motion Sidereal | Heliographic Latitude | Number | Days | Diurnal Motion Sidereal | Heliographic Latitude |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 42 | 2 | 14°.73 | 15°.5 | 358 | 3 | 14°.19 | 17°.8 | 708 | 5 | 13°.89 | 18°.4 |
| 43 | 2 | 13.84 | 15.4 | 359 | 5 | 14.55 | 18.0 | 709 | 6 | 14.39 | 17.5 |
| 44 | 2 | 14.22 | 19.2 | 360 | 3 | 14.19 | 16.1 | 713 | 5 | 14.54 | 19.6 |
| 47 | 2 | 14.73 | 20.0 | 365 | 3 | 14.35 | 16.5 | 714 | 3 | 13.86 | 15.9 |
| 48 | 2 | 14.22 | 15.9 | 369 | 3 | 14.39 | 17.0 | 716 | 2 | 14.34 | 19.5 |
| 53 | 2 | 14.22 | 19.9 | 370 | 3 | 14.30 | 17.7 | 719 | 2 | 14.14 | 16.0 |
| 56 | 2 | 15.24 | 18.5 | 373 | 2 | 13.79 | 19.1 | 721 | 4 | 14.40 | 17.0 |
| 59 | 2 | 14.89 | 17.6 | 388 | 3 | 13.58 | 15.3 | 722 | 4 | 14.31 | 18.3 |
| 60 | 2 | 14.89 | 18.6 | 389 | 3 | 14.24 | 16.7 | 723 | 2 | 14.24 | 17.5 |
| 61 | 2 | 14.76 | 19.3 | 394 | 2 | 14.06 | 17.5 | 739 | 2 | 14.09 | 18.8 |
| 69 | 3 | 14.69 | 16.3 | 399 | 4 | 14.15 | 18.0 | 744 | 2 | 13.99 | 16.7 |
| 70 | 2 | 14.26 | 15.9 | 422 | 4 | 13.98 | 19.1 | 756 | 2 | 14.01 | 19.3 |
| 78 | 2 | 14.15 | 19.4 | 423 | 5 | 14.03 | 15.4 | 760 | 2 | 13.89 | 18.7 |
| 120 | 2 | 15.17 | 17.1 | 424 | 2 | 14.12 | 19.0 | 768 | 2 | 13.93 | 19.6 |
| 132 | 3 | 14.40 | 19.1 | 425 | 2 | 14.01 | 15.0 | 770 | 2 | 13.93 | 16.8 |
| 138 | 3 | 14.11 | 19.9 | 427 | 6 | 13.78 | 18.9 | 775 | 2 | 14.43 | 19.8 |
| 145 | 3 | 13.36 | 19.3 | 430 | 6 | 13.63 | 18.4 | 776 | 2 | 13.53 | 17.1 |
| 153 | 3 | 14.23 | 18.7 | 433 | 2 | 13.71 | 18.1 | 788 | 2 | 13.93 | 17.3 |
| 154 | 3 | 14.30 | 15.6 | 434 | 2 | 13.91 | 17.3 | 793 | 2 | 14.56 | 19.3 |
| 155 | 3 | 14.34 | 17.2 | 442 | 2 | 14.02 | 16.2 | 796 | 2 | 14.87 | 17.2 |
| 156 | 3 | 13.93 | 17.7 | 443 | 4 | 13.92 | 17.6 | 798 | 5 | 14.41 | 15.4 |
| 161 | 3 | 14.33 | 18.3 | 449 | 2 | 15.16 | 16.2 | 799 | 2 | 14.56 | 16.6 |
| 162 | 2 | 14.62 | 19.8 | 450 | 2 | 15.16 | 17.8 | 801 | 2 | 12.92 | 19.8 |
| 163 | 2 | 13.70 | 17.0 | 456 | 2 | 15.28 | 19.3 | 804 | 2 | 14.87 | 16.8 |
| 168 | 3 | 14.85 | 17.2 | 457 | 2 | 15.54 | 18.3 | 806 | 2 | 14.87 | 17.9 |
| 171 | 3 | 14.32 | 17.3 | 458 | 4 | 14.43 | 20.0 | 828 | 4 | 14.26 | 19.6 |
| 172 | 3 | 14.15 | 17.0 | 488 | 2 | 14.65 | 19.2 | 829 | 4 | 14.29 | 16.7 |
| 185 | 2 | 14.13 | 15.4 | 489 | 2 | 14.45 | 18.9 | 832 | 2 | 13.92 | 16.5 |
| 186 | 2 | 15.15 | 19.6 | 492 | 2 | 14.32 | 17.2 | 833 | 2 | 14.01 | 17.9 |
| 189 | 2 | 13.92 | 17.9 | 493 | 2 | 14.62 | 18.3 | 834 | 2 | 14.39 | 16.5 |
| 14 | 3 | 14.60 | 17.1 | 494 | 2 | 14.43 | 18.1 | 835 | 2 | 13.83 | 19.1 |
| 15 | 3 | 14.46 | 16.6 | 495 | 2 | 14.82 | 16.2 | 836 | 2 | 13.73 | 19.5 |
| 16 | 3 | 14.10 | 16.5 | 497 | 2 | 14.32 | 17.1 | 837 | 4 | 14.48 | 15.3 |
| 20 | 3 | 14.64 | 20.0 | 499 | 2 | 14.72 | 18.5 | 838 | 2 | 14.48 | 19.6 |
| 36 | 2 | 14.33 | 19.0 | 504 | 2 | 14.95 | 15.4 | 839 | 2 | 14.48 | 16.1 |
| 190 | 2 | 14.33 | 18.0 | 505 | 2 | 15.16 | 16.0 | 842 | 2 | 14.01 | 15.5 |
| 193 | 2 | 13.83 | 17.5 | 507 | 2 | 14.42 | 15.1 | 843 | 2 | 13.83 | 16.9 |
| 194 | 2 | 14.70 | 15.0 | 510 | 2 | 14.20 | 16.3 | 844 | 2 | 13.73 | 18.9 |
| 195 | 2 | 14.20 | 15.7 | 512 | 2 | 14.52 | 18.0 | 852 | 3 | 13.95 | 15.3 |
| 197 | 2 | 13.96 | 18.8 | 514 | 2 | 13.89 | 17.8 | 853 | 3 | 14.42 | 16.9 |
| 201 | 2 | 13.46 | 18.3 | 526 | 2 | 13.77 | 18.9 | 861 | 4 | 13.91 | 15.4 |
| 202 | 2 | 13.83 | 19.6 | 535 | 2 | 15.19 | 15.3 | 862 | 3 | 13.85 | 17.2 |
| 210 | 2 | 14.08 | 16.9 | 536 | 2 | 14.55 | 17.9 | 865 | 4 | 14.23 | 18.7 |
| 211 | 2 | 13.59 | 17.3 | 539 | 2 | 14.01 | 17.6 | 892 | 3 | 13.90 | 17.8 |
| 212 | 2 | 13.46 | 15.0 | 544 | 2 | 14.01 | 19.7 | 908 | 2 | 14.43 | 18.8 |
| 215 | 2 | 15.19 | 17.0 | 600 | 4 | 14.46 | 15.5 | 909 | 2 | 14.63 | 19.6 |
| 216 | 2 | 14.08 | 15.5 | 601 | 2 | 14.15 | 19.0 | 910 | 2 | 14.73 | 17.6 |
| 223 | 2 | 13.83 | 17.1 | 602 | 2 | 14.15 | 17.6 | 914 | 2 | 13.83 | 17.2 |
| 224 | 2 | 13.83 | 17.6 | 603 | 2 | 14.15 | 16.0 | 917 | 2 | 14.03 | 17.7 |
| 226 | 3 | 13.96 | 16.4 | 604 | 2 | 13.72 | 15.5 | 918 | 2 | 14.63 | 17.7 |
| 229 | 5 | 14.22 | 16.6 | 605 | 2 | 12.66 | 19.7 | 921 | 2 | 14.43 | 16.0 |
| 270 | 2 | 13.98 | 16.2 | 608 | 3 | 14.43 | 18.3 | 922 | 2 | 14.23 | 18.8 |
| 271 | 4 | 14.22 | 15.8 | 609 | 2 | 13.93 | 15.2 | 923 | 2 | 14.13 | 18.5 |
| 284 | 3 | 14.44 | 19.6 | 613 | 2 | 13.30 | 18.2 | 924 | 2 | 14.33 | 15.7 |
| 287 | 3 | 13.53 | 16.7 | 637 | 4 | 14.28 | 16.6 | 935 | 2 | 14.63 | 15.7 |
| 296 | 2 | 13.86 | 16.1 | 641 | 2 | 14.15 | 15.6 | 960 | 2 | 13.95 | 16.7 |
| 297 | 2 | 13.86 | 17.3 | 642 | 2 | 14.26 | 16.8 | 962 | 3 | 14.12 | 18.8 |
| 302 | 3 | 14.34 | 15.5 | 650 | 2 | 13.94 | 17.4 | 964 | 3 | 13.62 | 16.3 |
| 303 | 2 | 12.56 | 17.9 | 658 | 2 | 14.53 | 19.8 | 965 | 3 | 13.72 | 18.9 |
| 310 | 3 | 13.74 | 18.0 | 663 | 3 | 14.64 | 18.1 | 966 | 3 | 14.27 | 19.7 |
| 311 | 4 | 14.45 | 15.7 | 675 | 5 | 14.18 | 16.1 | 970 | 2 | 15.15 | 17.2 |
| 312 | 4 | 14.36 | 15.9 | 676 | 5 | 14.25 | 17.4 | 973 | 3 | 14.17 | 18.4 |
| 314 | 2 | 14.73 | 16.3 | 677 | 3 | 14.15 | 17.3 | 982 | 2 | 13.25 | 15.1 |
| 315 | 2 | 13.65 | 17.3 | 678 | 3 | 13.98 | 17.4 | 990 | 2 | 13.50 | 19.7 |
| 316 | 4 | 13.76 | 15.1 | 679 | 5 | 14.00 | 17.8 | 992 | 2 | 14.60 | 19.6 |
| 317 | 2 | 14.51 | 17.5 | 687 | 5 | 14.13 | 16.7 | 997 | 2 | 14.00 | 19.7 |
| 326 | 4 | 13.86 | 16.0 | 691 | 5 | 13.97 | 18.0 | 1000 | 2 | 13.70 | 17.7 |
| 328 | 2 | 14.19 | 18.7 | 692 | 2 | 13.91 | 16.3 | 1023 | 2 | 14.83 | 16.4 |

TABLE II—*Continued*

Zone 15° to 20°—*Continued*

| Number | Days | Diurnal Motion Sidereal | Heliographic Latitude | Number | Days | Diurnal Motion Sidereal | Heliographic Latitude | Number | Days | Diurnal Motion Sidereal | Heliographic Latitude |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1024 | 4 | 14°02 | 18°9 | 1436 | 2 | 14°18 | 18°3 | 1917 | 2 | 14°17 | 15°5 |
| 1032 | 2 | 14.42 | 15.3 | 1438 | 2 | 14.18 | 15.1 | 1918 | 2 | 15.41 | 17.7 |
| 1040 | 3 | 14.37 | 15.1 | 1444 | 2 | 13.81 | 17.0 | 1922 | 2 | 14.27 | 18.7 |
| 1041 | 3 | 14.22 | 16.8 | 1448 | 2 | 14.73 | 19.8 | 1923 | 2 | 13.89 | 20.0 |
| 1042 | 3 | 14.77 | 18.8 | 1459 | 2 | 13.81 | 18.9 | 1926 | 2 | 13.98 | 16.0 |
| 1043 | 3 | 14.03 | 19.1 | 1461 | 2 | 14.55 | 19.6 | 1927 | 2 | 14.08 | 18.0 |
| 1044 | 3 | 14.32 | 17.0 | 1462 | 2 | 14.45 | 17.8 | 1942 | 2 | 14.11 | 19.9 |
| 1048 | 2 | 12.61 | 17.8 | 1463 | 2 | 13.62 | 17.5 | 1944 | 2 | 14.62 | 15.1 |
| 1068 | 2 | 14.14 | 16.0 | 1505 | 3 | 14.09 | 19.7 | 1945 | 2 | 14.42 | 17.0 |
| 1069 | 2 | 13.75 | 16.7 | 1507 | 2 | 13.85 | 19.5 | 1946 | 2 | 15.02 | 18.3 |
| 1071 | 2 | 15.12 | 19.7 | 1508 | 3 | 14.76 | 17.5 | 1949 | 2 | 14.92 | 18.2 |
| 1089 | 4 | 14.95 | 18.6 | 1509 | 3 | 14.47 | 17.0 | 1950 | 2 | 14.11 | 18.2 |
| 1091 | 4 | 14.50 | 18.8 | 1510 | 2 | 14.94 | 19.7 | 1951 | 2 | 14.11 | 15.1 |
| 1095 | 4 | 14.02 | 19.6 | 1524 | 2 | 14.78 | 15.0 | 1962 | 2 | 13.31 | 16.8 |
| 1099 | 2 | 14.36 | 16.0 | 1525 | 2 | 14.78 | 16.8 | 1965 | 2 | 14.52 | 17.9 |
| 1100 | 4 | 13.89 | 18.3 | 1528 | 2 | 13.56 | 18.9 | 1967 | 4 | 13.89 | 18.8 |
| 1123 | 2 | 13.94 | 16.4 | 1541 | 2 | 14.74 | 16.1 | 1968 | 3 | 13.85 | 17.5 |
| 1124 | 2 | 13.45 | 16.4 | 1542 | 2 | 14.25 | 19.1 | 1969 | 2 | 14.25 | 18.2 |
| 1130 | 3 | 14.50 | 15.7 | 1543 | 3 | 13.83 | 18.6 | 1975 | 2 | 13.54 | 19.1 |
| 1133 | 2 | 14.47 | 18.7 | 1546 | 3 | 14.28 | 15.8 | 1982 | 4 | 14.19 | 18.5 |
| 1149 | 2 | 14.37 | 15.5 | 1548 | 2 | 14.15 | 15.7 | 1983 | 2 | 14.66 | 15.5 |
| 1171 | 2 | 14.52 | 17.7 | 1550 | 2 | 14.64 | 15.0 | 2009 | 2 | 13.87 | 19.4 |
| 1172 | 2 | 13.78 | 19.9 | 1563 | 2 | 14.45 | 15.3 | 2010 | 6 | 13.71 | 19.3 |
| 1173 | 2 | 13.99 | 17.7 | 1566 | 5 | 14.17 | 16.3 | 2019 | 2 | 13.96 | 16.9 |
| 1175 | 2 | 14.52 | 17.8 | 1567 | 3 | 13.53 | 17.5 | 2020 | 4 | 13.99 | 20.0 |
| 1176 | 2 | 14.63 | 19.8 | 1569 | 2 | 13.85 | 18.0 | 2021 | 2 | 13.85 | 19.1 |
| 1177 | 2 | 13.47 | 17.0 | 1570 | 3 | 13.93 | 17.8 | 2042 | 6 | 14.44 | 15.1 |
| 1178 | 2 | 14.20 | 16.9 | 1588 | 3 | 14.37 | 15.8 | 2043 | 4 | 14.32 | 17.7 |
| 1208 | 3 | 12.90 | 16.4 | 1590 | 2 | 14.01 | 16.4 | 2044 | 6 | 13.77 | 17.5 |
| 1209 | 3 | 13.44 | 19.2 | 1601 | 2 | 13.42 | 15.3 | 2045 | 4 | 13.86 | 16.0 |
| 1212 | 2 | 14.35 | 15.5 | 1608 | 7 | 13.60 | 16.4 | 2070 | 2 | 14.80 | 16.2 |
| 1213 | 2 | 14.45 | 16.2 | 1611 | 3 | 14.41 | 16.7 | 2085 | 2 | 14.65 | 15.1 |
| 1214 | 2 | 14.45 | 18.4 | 1612 | 5 | 13.75 | 16.2 | 2089 | 2 | 14.90 | 17.2 |
| 1215 | 2 | 15.05 | 17.6 | 1628 | 3 | 14.15 | 19.7 | 2127 | 4 | 13.65 | 19.3 |
| 1216 | 2 | 15.65 | 18.9 | 1633 | 3 | 14.40 | 17.3 | 2129 | 4 | 13.82 | 18.5 |
| 1217 | 2 | 13.84 | 16.8 | 1636 | 3 | 14.01 | 16.0 | 2130 | 4 | 14.23 | 15.5 |
| 1218 | 2 | 13.84 | 19.3 | 1642 | 2 | 14.63 | 18.3 | 2134 | 3 | 15.06 | 18.1 |
| 1221 | 2 | 15.75 | 16.1 | 1643 | 2 | 13.73 | 17.0 | 2135 | 2 | 14.52 | 17.0 |
| 1240 | 2 | 14.35 | 17.4 | 1644 | 2 | 14.83 | 15.4 | 2141 | 3 | 13.74 | 16.8 |
| 1246 | 3 | 14.43 | 19.1 | 1649 | 2 | 14.23 | 17.3 | 2164 | 2 | 14.59 | 15.4 |
| 1247 | 3 | 14.27 | 17.4 | 1667 | 2 | 14.65 | 15.3 | 2167 | 2 | 14.89 | 18.6 |
| 1251 | 4 | 13.94 | 15.6 | 1668 | 2 | 14.34 | 17.3 | 2170 | 2 | 14.89 | 15.0 |
| 1252 | 4 | 14.08 | 17.1 | 1673 | 3 | 13.84 | 15.5 | 2173 | 4 | 14.01 | 18.7 |
| 1253 | 4 | 14.11 | 18.9 | 1674 | 3 | 14.35 | 17.8 | 2174 | 2 | 15.20 | 19.7 |
| 1254 | 3 | 14.33 | 18.0 | 1675 | 3 | 14.45 | 18.4 | 2188 | 4 | 14.00 | 20.0 |
| 1272 | 2 | 13.95 | 17.6 | 1676 | 2 | 14.24 | 19.4 | 2189 | 2 | 13.57 | 17.2 |
| 1273 | 2 | 14.95 | 18.2 | 1678 | 3 | 13.94 | 16.4 | 2201 | 4 | 14.07 | 16.7 |
| 1306 | 3 | 14.74 | 15.1 | 1681 | 3 | 14.04 | 15.3 | 2202 | 4 | 13.66 | 16.8 |
| 1345 | 7 | 13.85 | 18.0 | 1683 | 2 | 14.75 | 18.9 | 2203 | 4 | 13.67 | 16.8 |
| 1351 | 2 | 13.65 | 18.6 | 1719 | 2 | 14.85 | 15.1 | 2204 | 4 | 14.09 | 19.6 |
| 1357 | 5 | 14.15 | 17.3 | 1755 | 2 | 14.69 | 19.3 | 2207 | 3 | 13.86 | 16.5 |
| 1358 | 7 | 14.37 | 17.1 | 1756 | 2 | 13.39 | 18.2 | 2212 | 3 | 14.31 | 18.2 |
| 1361 | 4 | 14.08 | 19.9 | 1762 | 2 | 14.39 | 15.2 | 2216 | 2 | 14.64 | 17.4 |
| 1366 | 4 | 14.46 | 18.2 | 1804 | 2 | 14.04 | 18.1 | 2218 | 2 | 15.38 | 17.1 |
| 1367 | 4 | 14.11 | 17.3 | 1805 | 2 | 14.44 | 15.6 | 2219 | 2 | 15.01 | 17.0 |
| 1368 | 4 | 14.26 | 19.4 | 1806 | 2 | 14.44 | 15.9 | 2220 | 2 | 15.10 | 16.9 |
| 1370 | 3 | 14.52 | 17.3 | 1807 | 2 | 14.34 | 15.0 | 2222 | 2 | 15.29 | 15.5 |
| 1395 | 2 | 14.51 | 17.7 | 1814 | 2 | 13.04 | 16.1 | 2223 | 2 | 14.64 | 19.8 |
| 1396 | 2 | 14.12 | 18.2 | 1816 | 2 | 14.14 | 20.0 | 2225 | 2 | 15.01 | 17.1 |
| 1397 | 2 | 14.12 | 19.2 | 1819 | 2 | 14.44 | 18.8 | 2249 | 4 | 14.89 | 16.6 |
| 1411 | 2 | 14.41 | 17.1 | 1822 | 2 | 14.34 | 17.9 | 2250 | 4 | 13.98 | 18.6 |
| 1412 | 2 | 14.81 | 15.3 | 1830 | 2 | 14.04 | 19.7 | 2251 | 4 | 14.03 | 16.7 |
| 1415 | 3 | 13.84 | 19.3 | 1853 | 2 | 14.34 | 16.0 | 2257 | 2 | 13.94 | 16.5 |
| 1419 | 3 | 15.06 | 17.2 | 1854 | 2 | 14.24 | 16.2 | 2261 | 2 | 14.54 | 19.2 |
| 1420 | 3 | 14.81 | 16.6 | 1868 | 2 | 13.72 | 18.6 | 2290 | 6 | 13.93 | 18.1 |
| 1421 | 3 | 13.99 | 18.1 | 1908 | 2 | 14.08 | 19.1 | 2292 | 4 | 13.99 | 16.9 |
| 1422 | 3 | 14.55 | 18.8 | 1911 | 2 | 14.17 | 19.4 | 2300 | 4 | 14.10 | 18.8 |
| 1434 | 3 | 14.04 | 17.5 | 1914 | 2 | 14.65 | 19.9 | 2302′ | 4 | 14.30 | 16.2 |

TABLE II—*Continued*

Zone 15° to 20°—*Continued*

| Number | Days | Diurnal Motion Sidereal | Heliographic Latitude | Number | Days | Diurnal Motion Sidereal | Heliographic Latitude | Number | Days | Diurnal Motion Sidereal | Heliographic Latitude |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2328 | 2 | 14°31 | 17°2 | 3050 | 2 | 14°20 | 17°0 | 3417 | 2 | 15°24 | 16°9 |
| 2332 | 2 | 13.72 | 15.0 | 3110 | 4 | 14.64 | 19.4 | 3425 | 2 | 14.16 | 18.1 |
| 2365 | 3 | 14.15 | 15.9 | 3111 | 4 | 14.16 | 16.6 | 3434 | 4 | 14.44 | 18.4 |
| 2384 | 4 | 13.52 | 18.5 | 3114 | 3 | 15.09 | 18.5 | 3436 | 2 | 14.33 | 17.0 |
| 2385 | 2 | 14.02 | 20.0 | 3115 | 3 | 14.49 | 16.1 | 3439 | 3 | 13.76 | 15.1 |
| 2392 | 4 | 13.92 | 18.9 | 3128 | 2 | 14.56 | 15.0 | 3440 | 3 | 14.49 | 16.6 |
| 2416 | 2 | 14.19 | 15.5 | 3130 | 2 | 14.21 | 15.2 | 3442 | 3 | 14.49 | 17.9 |
| 2466 | 2 | 13.17 | 18.1 | 3131 | 2 | 14.09 | 17.0 | 3455 | 2 | 14.67 | 15.4 |
| 2533 | 2 | 14.98 | 15.1 | 3132 | 2 | 14.92 | 12.3 | 3475 | 3 | 14.73 | 18.2 |
| 2538 | 2 | 14.51 | 15.9 | 3151 | 2 | 14.92 | 18.0 | 3476 | 5 | 14.84 | 19.6 |
| 2570 | 4 | 14.45 | 15.8 | 3184 | 2 | 13.57 | 18.3 | 3481 | 3 | 14.79 | 15.5 |
| 2571 | 2 | 14.00 | 17.5 | 3199 | 6 | 14.26 | 15.1 | 3482 | 2 | 14.85 | 17.7 |
| 2575 | 2 | 14.38 | 16.7 | 3200 | 3 | 14.28 | 17.2 | 3490 | 4 | 13.82 | 19.2 |
| 2577 | 2 | 13.72 | 19.3 | 3201 | 2 | 14.28 | 18.5 | 3491 | 2 | 14.41 | 19.0 |
| 2590 | 2 | 12.86 | 15.4 | 3211 | 4 | 14.16 | 15.6 | 3506 | 3 | 13.88 | 15.7 |
| 2591 | 2 | 14.73 | 15.8 | 3216 | 2 | 14.57 | 17.0 | 3507 | 3 | 14.81 | 15.7 |
| 2635 | 2 | 15.61 | 16.9 | 3219 | 2 | 14.14 | 15.1 | 3550 | 3 | 14.34 | 15.3 |
| 2636 | 2 | 14.51 | 18.2 | 3222 | 2 | 14.14 | 17.6 | 3579 | 2 | 13.58 | 18.5 |
| 2707 | 2 | 14.68 | 18.2 | 3226 | 3 | 14.24 | 16.8 | 3580 | 2 | 14.28 | 16.5 |
| 2729 | 2 | 14.32 | 17.7 | 3257 | 2 | 14.34 | 17.9 | 3596 | 2 | 13.88 | 16.8 |
| 2730 | 5 | 14.25 | 15.3 | 3259 | 2 | 14.07 | 19.8 | 3598 | 2 | 13.88 | 15.2 |
| 2750 | 2 | 13.39 | 20.0 | 3265 | 2 | 13.81 | 17.5 | 3610 | 2 | 14.38 | 16.5 |
| 2751 | 2 | 13.58 | 19.8 | 3267 | 2 | 13.81 | 17.5 | 3614 | 2 | 14.35 | 17.7 |
| 2752 | 2 | 14.25 | 15.8 | 3280 | 2 | 14.50 | 15.8 | 3634 | 2 | 14.54 | 18.4 |
| 2791 | 2 | 14.40 | 17.9 | 3306 | 2 | 14.02 | 15.1 | 3670 | 6 | 14.27 | 17.2 |
| 2792 | 2 | 14.30 | 15.7 | 3308 | 2 | 14.55 | 17.0 | 3671 | 3 | 14.34 | 19.0 |
| 2796 | 3 | 14.27 | 16.0 | 3309 | 2 | 13.81 | 15.9 | 3696 | 2 | 14.03 | 17.2 |
| 2797 | 2 | 15.41 | 17.7 | 3310 | 2 | 13.91 | 17.9 | 3697 | 4 | 14.28 | 17.3 |
| 2798 | 3 | 14.88 | 17.9 | 3311 | 2 | 14.65 | 18.2 | 3711 | 2 | 14.12 | 19.3 |
| 2821 | 2 | 14.51 | 15.4 | 3312 | 2 | 14.55 | 16.2 | 3712 | 2 | 14.63 | 18.4 |
| 2837 | 2 | 14.84 | 15.7 | 3341 | 2 | 13.93 | 17.8 | 3765 | 3 | 14.23 | 17.6 |
| 2838 | 2 | 14.11 | 16.5 | 3356′ | 2 | 14.44 | 16.5 | 3766 | 3 | 14.29 | 15.6 |
| 2872 | 2 | 12.81 | 18.1 | 3357′ | 2 | 13.40 | 16.5 | 3770 | 3 | 14.33 | 15.3 |
| 2897 | 2 | 14.14 | 15.6 | 3394 | 4 | 14.50 | 16.2 | 3789 | 2 | 14.35 | 15.8 |
| 2925 | 2 | 15.08 | 17.0 | 3395 | 4 | 14.34 | 18.7 | 3802 | 2 | 13.68 | 16.3 |
| 2955 | 2 | 14.93 | 15.9 | 3396 | 2 | 14.68 | 18.6 | 3803 | 2 | 13.78 | 16.0 |
| 2956 | 2 | 14.73 | 15.5 | 3397 | 6 | 14.29 | 18.9 | 3805 | 2 | 14.18 | 15.5 |
| 3033 | 2 | 13.99 | 15.3 | 3415 | 4 | 14.38 | 16.7 | | | | |

TABLE II—*Continued*

Zone −15° to −20° { Mean Latitude = −17°.58
Mean Diurnal Motion = 14°.35

| Number | Days | Diurnal Motion Sidereal | Heliographic Latitude | Number | Days | Diurnal Motion Sidereal | Heliographic Latitude | Number | Days | Diurnal Motion Sidereal | Heliographic Latitude |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 37 | 2 | 14°.48 | −17°.5 | 569 | 2 | 14°.87 | −18°.4 | 1076 | 2 | 14°.63 | −16°.3 |
| 39 | 2 | 14.86 | −18.0 | 571 | 2 | 14.87 | −17.0 | 1077 | 2 | 14.43 | −19.6 |
| 83 | 2 | 14.89 | −19.9 | 577 | 2 | 13.62 | −19.2 | 1111 | 2 | 13.64 | −16.1 |
| 84 | 2 | 15.02 | −19.9 | 578 | 2 | 14.25 | −16.2 | 1112 | 4 | 14.69 | −17.7 |
| 85 | 2 | 15.02 | −17.2 | 583 | 4 | 14.32 | −15.8 | 1120 | 4 | 14.03 | −18.5 |
| 86 | 3 | 14.33 | −17.5 | 584 | 2 | 13.83 | −19.0 | 1142 | 2 | 14.67 | −17.6 |
| 79 | 2 | 14.40 | −20.0 | 590 | 2 | 13.83 | −19.0 | 1159 | 2 | 14.20 | −18.9 |
| 80′ | 3 | 14.34 | −17.5 | 618 | 2 | 13.35 | −18.3 | 1160 | 2 | 14.84 | −18.4 |
| 174 | 3 | 13.82 | −19.5 | 619 | 2 | 13.35 | −17.9 | 1161 | 2 | 14.73 | −18.7 |
| 175 | 2 | 15.05 | −15.3 | 629 | 2 | 14.20 | −19.0 | 1169 | 2 | 14.42 | −17.1 |
| 176 | 2 | 14.43 | −15.7 | 630 | 6 | 13.78 | −16.8 | 1191 | 3 | 14.73 | −18.5 |
| 5 | 3 | 13.19 | −19.2 | 631 | 2 | 14.49 | −17.2 | 1197 | 3 | 14.42 | −20.0 |
| 11 | 3 | 14.05 | −15.5 | 632 | 2 | 14.12 | −16.3 | 1200 | 3 | 13.52 | −17.3 |
| 13 | 3 | 13.64 | −16.7 | 681 | 2 | 14.37 | −18.4 | 1223 | 2 | 14.55 | −19.4 |
| 25 | 2 | 14.51 | −18.7 | 693 | 2 | 14.77 | −15.1 | 1224 | 2 | 14.15 | −16.9 |
| 26 | 2 | 12.98 | −15.7 | 699 | 2 | 14.02 | −17.6 | 1225 | 2 | 13.64 | −16.5 |
| 217 | 2 | 15.56 | −18.4 | 700 | 2 | 13.27 | −19.6 | 1226 | 2 | 15.05 | −15.1 |
| 218 | 2 | 14.70 | −17.8 | 702 | 2 | 14.02 | −18.8 | 1227 | 2 | 13.74 | −18.1 |
| 222 | 2 | 14.57 | −19.9 | 724 | 2 | 14.54 | −19.2 | 1241 | 2 | 13.24 | −15.1 |
| 231 | 3 | 13.86 | −17.7 | 725 | 2 | 14.65 | −17.8 | 1243 | 2 | 15.05 | −17.2 |
| 232 | 2 | 14.76 | −16.7 | 726 | 3 | 14.57 | −19.4 | 1258 | 4 | 14.07 | −17.2 |
| 236 | 2 | 14.30 | −17.0 | 728 | 2 | 13.94 | −15.8 | 1259 | 4 | 14.16 | −17.3 |
| 238 | 3 | 14.93 | −19.3 | 729 | 3 | 14.21 | −20.0 | 1260 | 4 | 14.07 | −19.8 |
| 239 | 3 | 14.01 | −17.9 | 733 | 2 | 13.84 | −15.9 | 1263 | 4 | 14.34 | −18.8 |
| 241 | 2 | 14.12 | −16.8 | 735 | 2 | 14.89 | −17.8 | 1282 | 2 | 14.95 | −18.3 |
| 242 | 5 | 14.11 | −19.7 | 736 | 2 | 13.89 | −16.8 | 1285 | 2 | 14.25 | −20.0 |
| 243 | 3 | 14.39 | −20.0 | 758 | 2 | 14.01 | −19.9 | 1287 | 2 | 14.17 | −18.9 |
| 244 | 2 | 13.94 | −19.8 | 763 | 2 | 14.43 | −19.7 | 1288 | 2 | 15.06 | −15.0 |
| 253 | 2 | 14.21 | −16.4 | 764 | 2 | 14.43 | −17.6 | 1289 | 2 | 14.27 | −16.3 |
| 262 | 2 | 14.08 | −18.4 | 777 | 2 | 13.63 | −15.9 | 1301 | 3 | 13.92 | −16.4 |
| 275 | 2 | 15.32 | −19.2 | 792 | 2 | 14.33 | −17.9 | 1302 | 2 | 13.97 | −15.5 |
| 283 | 6 | 14.40 | −14.8 | 812 | 3 | 13.90 | −15.0 | 1303 | 2 | 15.26 | −17.1 |
| 289 | 5 | 14.42 | −17.3 | 814 | 2 | 13.92 | −16.2 | 1355 | 5 | 14.26 | −17.4 |
| 321 | 2 | 14.62 | −16.6 | 818 | 4 | 14.21 | −15.6 | 1374 | 4 | 14.26 | −18.8 |
| 322 | 2 | 13.97 | −19.6 | 819 | 2 | 14.01 | −16.5 | 1377 | 4 | 14.17 | −15.8 |
| 332 | 2 | 14.64 | −17.4 | 849 | 3 | 14.11 | −19.5 | 1378 | 4 | 14.53 | −17.5 |
| 333 | 3 | 14.71 | −18.1 | 850 | 3 | 14.06 | −19.9 | 1379 | 4 | 14.41 | −19.3 |
| 354 | 3 | 14.44 | −15.8 | 855 | 3 | 14.61 | −16.0 | 1380 | 4 | 14.80 | −17.7 |
| 355 | 2 | 13.47 | −19.2 | 857 | 3 | 13.74 | −17.7 | 1382 | 4 | 14.53 | −19.2 |
| 356 | 3 | 14.47 | −17.3 | 877 | 2 | 14.15 | −17.8 | 1393 | 2 | 14.19 | −19.4 |
| 357 | 3 | 14.79 | −18.9 | 879 | 3 | 14.11 | −16.0 | 1394 | 3 | 14.36 | −15.4 |
| 374 | 4 | 13.89 | −16.8 | 881 | 2 | 14.15 | −19.3 | 1400 | 2 | 14.22 | −20.0 |
| 375 | 2 | 14.98 | −18.1 | 888 | 2 | 14.56 | −15.9 | 1401 | 2 | 14.51 | −16.9 |
| 376 | 2 | 13.47 | −15.7 | 898 | 5 | 14.03 | −17.8 | 1406 | 2 | 14.32 | −16.0 |
| 386 | 2 | 14.44 | −17.5 | 900 | 4 | 13.84 | −19.0 | 1426 | 3 | 14.50 | −15.1 |
| 390 | 3 | 14.66 | −18.5 | 902 | 4 | 14.56 | −16.7 | 1428 | 3 | 13.94 | −18.4 |
| 391 | 3 | 14.57 | −18.1 | 903 | 2 | 14.13 | −15.3 | 1429 | 3 | 14.40 | −17.2 |
| 392 | 3 | 14.48 | −15.6 | 926 | 2 | 14.13 | −19.6 | 1431 | 3 | 14.76 | −15.7 |
| 402 | 2 | 14.63 | −18.4 | 932 | 2 | 14.03 | −19.8 | 1456 | 2 | 13.25 | −17.8 |
| 408 | 3 | 14.72 | −17.0 | 936 | 2 | 14.23 | −18.5 | 1457 | 2 | 14.36 | −18.5 |
| 410 | 3 | 14.42 | −18.1 | 942 | 2 | 15.23 | −18.5 | 1458 | 2 | 14.45 | −16.9 |
| 417 | 2 | 14.73 | −16.6 | 943 | 2 | 15.33 | −19.0 | 1465 | 2 | 13.53 | −17.0 |
| 418 | 2 | 14.32 | −18.0 | 944 | 2 | 14.33 | −18.5 | 1466 | 2 | 14.08 | −15.1 |
| 419 | 2 | 14.01 | −15.5 | 945 | 2 | 13.73 | −16.8 | 1473 | 3 | 14.28 | −17.7 |
| 463 | 4 | 14.50 | −17.9 | 947 | 3 | 13.87 | −17.1 | 1475 | 3 | 13.89 | −19.8 |
| 465 | 2 | 14.55 | −19.4 | 949 | 3 | 13.07 | −18.7 | 1476 | 3 | 14.95 | −15.0 |
| 474 | 2 | 14.15 | −17.0 | 950 | 2 | 13.55 | −16.4 | 1479 | 3 | 14.91 | −17.5 |
| 477 | 2 | 14.55 | −18.4 | 952 | 2 | 13.45 | −19.1 | 1480 | 3 | 14.33 | −18.0 |
| 479 | 2 | 13.95 | −16.1 | 953 | 2 | 13.95 | −20.0 | 1485 | 2 | 13.85 | −18.6 |
| 521 | 2 | 14.63 | −16.1 | 989 | 2 | 12.89 | −15.7 | 1494 | 2 | 13.85 | −17.2 |
| 527 | 2 | 14.42 | −18.1 | 1050 | 3 | 13.83 | −16.2 | 1516 | 2 | 14.40 | −15.6 |
| 545 | 2 | 14.55 | −18.9 | 1051 | 3 | 14.22 | −16.1 | 1525′ | 2 | 14.40 | −15.5 |
| 553 | 2 | 15.30 | −17.8 | 1058 | 3 | 14.13 | −15.6 | 1574 | 3 | 14.62 | −15.2 |
| 554 | 2 | 14.33 | −19.5 | 1059 | 3 | 14.27 | −17.2 | 1575 | 3 | 13.98 | −16.1 |
| 555 | 2 | 14.87 | −19.9 | 1060 | 3 | 14.52 | −17.3 | 1591 | 2 | 14.60 | −17.5 |
| 562 | 2 | 14.01 | −15.0 | 1064 | 3 | 15.56 | −15.2 | 1615 | 5 | 14.32 | −16.0 |
| 565 | 2 | 14.12 | −18.4 | 1073 | 2 | 14.63 | −17.0 | 1616 | 3 | 13.54 | −15.0 |
| 568 | 2 | 14.01 | −16.0 | 1074 | 2 | 14.53 | −18.8 | 1617 | 3 | 14.44 | −19.7 |

TABLE II—*Continued*

Zone −15° to −20°—*Continued*

| Number | Days | Diurnal Motion Sidereal | Helio-graphic Latitude | Number | Days | Diurnal Motion Sidereal | Helio-graphic Latitude | Number | Days | Diurnal Motion Sidereal | Helio-graphic Latitude |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1618 | 3 | 14°39 | −18°5 | 2112 | 4 | 14°47 | −15°8 | 2489 | 3 | 14°51 | −18°1 |
| 1650 | 2 | 12.84 | −17.8 | 2113 | 2 | 13.75 | −16.2 | 2491 | 2 | 15.06 | −18.9 |
| 1662 | 2 | 15.33 | −19.0 | 2114 | 4 | 14.17 | −16.3 | 2494 | 2 | 14.96 | −15.3 |
| 1664 | 2 | 14.13 | −19.4 | 2115 | 4 | 14.42 | −19.0 | 2497 | 3 | 14.77 | −15.0 |
| 1665 | 2 | 15.23 | −17.7 | 2137 | 3 | 15.02 | −17.8 | 2498 | 3 | 14.15 | −16.8 |
| 1704 | 2 | 14.86 | −15.9 | 2138 | 2 | 13.24 | −19.2 | 2500 | 3 | 14.41 | −19.9 |
| 1714 | 3 | 14.29 | −17.0 | 2140 | 2 | 14.87 | −18.2 | 2501 | 3 | 14.51 | −16.5 |
| 1715 | 3 | 13.99 | −17.0 | 2142 | 3 | 14.76 | −16.8 | 2502 | 2 | 14.13 | −17.8 |
| 1716 | 2 | 14.44 | −17.6 | 2144 | 3 | 15.13 | −19.3 | 2503 | 3 | 14.46 | −17.1 |
| 1718 | 3 | 14.90 | −17.7 | 2147 | 2 | 14.47 | −15.8 | 2512 | 4 | 14.11 | −18.5 |
| 1721 | 2 | 14.85 | −17.7 | 2149 | 3 | 14.47 | −19.4 | 2515 | 3 | 14.28 | −19.0 |
| 1727 | 2 | 13.75 | −20.0 | 2178 | 2 | 13.87 | −19.3 | 2520 | 2 | 14.40 | −16.8 |
| 1729 | 2 | 13.15 | −17.0 | 2241 | 2 | 13.53 | −16.4 | 2522 | 2 | 14.60 | −17.8 |
| 1731 | 2 | 14.15 | −15.8 | 2242 | 2 | 14.55 | −17.2 | 2523 | 6 | 14.53 | −17.1 |
| 1745 | 2 | 14.19 | −16.8 | 2243 | 2 | 14.64 | −16.4 | 2525 | 4 | 14.13 | −15.3 |
| 1747 | 2 | 14.39 | −17.4 | 2244 | 2 | 14.27 | −16.3 | 2530 | 6 | 14.19 | −15.7 |
| 1748 | 2 | 14.19 | −18.4 | 2246 | 2 | 12.89 | −15.9 | 2534 | 2 | 14.42 | −17.5 |
| 1749 | 2 | 14.89 | −16.1 | 2247 | 2 | 13.90 | −18.8 | 2535 | 5 | 13.92 | −18.7 |
| 1753 | 2 | 13.49 | −17.5 | 2264 | 2 | 14.93 | −19.5 | 2537 | 3 | 14.01 | −15.4 |
| 1767 | 2 | 14.09 | −18.2 | 2266 | 2 | 14.34 | −16.9 | 2544 | 2 | 14.32 | −18.6 |
| 1768 | 2 | 13.69 | −19.0 | 2271 | 4 | 14.25 | −17.2 | 2552 | 3 | 14.55 | −19.4 |
| 1772 | 2 | 14.97 | −18.2 | 2272 | 4 | 13.74 | −17.0 | 2556 | 3 | 14.99 | −15.1 |
| 1773 | 2 | 14.00 | −17.1 | 2276 | 2 | 14.14 | −16.1 | 2559 | 2 | 15.16 | −18.7 |
| 1774 | 2 | 13.81 | −17.6 | 2277 | 2 | 13.65 | −17.1 | 2560 | 3 | 15.22 | −16.8 |
| 1777 | 2 | 15.07 | −19.9 | 2280 | 4 | 13.75 | −15.0 | 2562 | 3 | 13.76 | −15.8 |
| 1778 | 2 | 14.39 | −18.0 | 2281 | 4 | 14.71 | −16.4 | 2595 | 6 | 14.67 | −17.4 |
| 1779 | 2 | 14.39 | −16.1 | 2283 | 4 | 14.36 | −16.9 | 2596 | 2 | 14.00 | −19.1 |
| 1780 | 2 | 14.29 | −17.6 | 2284 | 4 | 14.70 | −18.5 | 2600 | 3 | 15.12 | −19.9 |
| 1782 | 2 | 14.39 | −16.3 | 2287 | 4 | 14.19 | −19.4 | 2602 | 3 | 14.82 | −18.8 |
| 1785 | 2 | 14.78 | −18.6 | 2312 | 3 | 14.53 | −18.4 | 2603 | 3 | 14.65 | −15.2 |
| 1787 | 2 | 14.20 | −19.4 | 2313 | 4 | 14.50 | −17.8 | 2607 | 3 | 15.04 | −17.5 |
| 1789 | 2 | 14.20 | −18.1 | 2314 | 4 | 14.49 | −15.4 | 2609 | 2 | 14.62 | −17.0 |
| 1812 | 2 | 13.94 | −17.0 | 2315 | 6 | 14.41 | −15.0 | 2616 | 2 | 14.87 | −18.2 |
| 1856 | 2 | 14.33 | −17.4 | 2321 | 4 | 14.46 | −17.9 | 2619 | 2 | 15.19 | −15.7 |
| 1857 | 2 | 14.02 | −17.6 | 2322 | 2 | 13.62 | −17.1 | 2620 | 2 | 14.71 | −18.1 |
| 1858 | 2 | 14.74 | −16.1 | 2323 | 2 | 13.32 | −17.2 | 2628 | 2 | 15.83 | −15.3 |
| 1866 | 2 | 14.64 | −16.3 | 2336 | 3 | 14.58 | −16.2 | 2647 | 2 | 15.14 | −15.6 |
| 1876 | 2 | 14.74 | −19.1 | 2341 | 2 | 14.36 | −18.1 | 2694 | 2 | 15.34 | −19.2 |
| 1880 | 2 | 13.92 | −17.6 | 2346 | 2 | 14.97 | −16.8 | 2708 | 2 | 14.41 | −15.6 |
| 1881 | 2 | 15.04 | −18.6 | 2347 | 2 | 14.77 | −18.2 | 2709 | 2 | 14.68 | −16.0 |
| 1882 | 2 | 14.23 | −19.8 | 2347′ | 2 | 14.67 | −16.5 | 2713 | 2 | 14.14 | −17.4 |
| 1885 | 2 | 14.02 | −18.7 | 2348 | 3 | 15.13 | −19.2 | 2721 | 2 | 14.62 | −15.7 |
| 1886 | 2 | 14.74 | −16.8 | 2342′ | 3 | 13.97 | −17.6 | 2722 | 2 | 15.03 | −15.8 |
| 1887 | 2 | 14.94 | −17.1 | 2351 | 2 | 14.28 | −15.4 | 2724 | 2 | 15.96 | −17.4 |
| 1888 | 2 | 13.92 | −18.9 | 2353 | 2 | 14.28 | −19.4 | 2741 | 4 | 14.07 | −19.1 |
| 1892 | 2 | 14.36 | −15.4 | 2357 | 6 | 14.55 | −15.6 | 2748 | 2 | 13.87 | −15.2 |
| 1996 | 2 | 13.85 | −20.2 | 2361 | 5 | 14.52 | −17.4 | 2753 | 2 | 14.06 | −19.0 |
| 2013 | 6 | 14.61 | −17.7 | 2362 | 3 | 14.30 | −16.7 | 2755 | 3 | 13.40 | −16.9 |
| 2028 | 2 | 14.89 | −19.1 | 2363 | 3 | 13.69 | −18.4 | 2778 | 2 | 14.11 | −15.6 |
| 2027′ | 2 | 15.31 | −17.2 | 2367 | 2 | 15.50 | −16.8 | 2779 | 2 | 14.41 | −15.8 |
| 2031 | 4 | 13.98 | −18.4 | 2368 | 2 | 14.34 | −16.1 | 2818 | 2 | 14.13 | −17.4 |
| 2068 | 2 | 14.91 | −17.3 | 2370 | 2 | 14.76 | −20.0 | 2832 | 2 | 14.32 | −15.4 |
| 2083 | 3 | 14.37 | −16.8 | 2371 | 2 | 14.65 | −17.6 | 2878 | 2 | 14.51 | −19.9 |
| 2084 | 3 | 14.02 | −19.5 | 2372 | 2 | 14.65 | −17.2 | 2882 | 2 | 15.21 | −16.9 |
| 2086 | 2 | 14.90 | −17.2 | 2373 | 2 | 14.55 | −15.5 | 2883 | 2 | 14.21 | −16.4 |
| 2088 | 4 | 14.33 | −18.9 | 2401 | 4 | 14.91 | −18.3 | 2884 | 2 | 15.01 | −18.3 |
| 2093 | 4 | 14.38 | −15.6 | 2409 | 2 | 14.59 | −15.5 | 2905 | 3 | 14.06 | −19.5 |
| 2094 | 3 | 14.23 | −17.7 | 2413 | 2 | 13.68 | −17.6 | 2911 | 2 | 14.88 | −18.2 |
| 2098 | 2 | 13.24 | −18.0 | 2429 | 2 | 14.36 | −17.9 | 2912 | 2 | 14.49 | −15.4 |
| 2099 | 2 | 13.24 | −19.8 | 2430 | 2 | 14.06 | −18.8 | 2913 | 2 | 15.68 | −19.5 |
| 2101 | 2 | 14.39 | −16.6 | 2431 | 2 | 14.96 | −19.7 | 2914 | 2 | 15.48 | −17.1 |
| 2103 | 4 | 14.18 | −15.4 | 2458 | 2 | 14.76 | −16.1 | 2930 | 3 | 14.09 | −17.3 |
| 2104 | 2 | 13.75 | −18.9 | 2460 | 2 | 13.96 | −18.9 | 2931 | 3 | 14.33 | −18.9 |
| 2105 | 4 | 14.29 | −17.3 | 2470 | 2 | 13.07 | −16.1 | 2932 | 2 | 14.50 | −16.2 |
| 2106 | 2 | 13.24 | −17.9 | 2472 | 3 | 14.85 | −18.4 | 2939 | 2 | 14.20 | −19.2 |
| 2107 | 2 | 14.13 | −19.8 | 2473 | 3 | 14.09 | −19.9 | 2942 | 2 | 13.93 | −19.1 |
| 2110 | 3 | 14.60 | −19.7 | 2477 | 3 | 14.25 | −18.4 | 2943 | 2 | 14.02 | −15.3 |
| 2111 | 4 | 14.76 | −17.9 | 2486 | 3 | 14.87 | −15.5 | 2974 | 3 | 14.73 | −15.9 |

TABLE II—*Continued*

Zone −15° to −20°—*Continued*

| Number | Days | Diurnal Motion Sidereal | Heliographic Latitude | Number | Days | Diurnal Motion Sidereal | Heliographic Latitude | Number | Days | Diurnal Motion Sidereal | Heliographic Latitude |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2975 | 2 | 14°.13 | −15°.0 | 3208 | 4 | 14°.46 | −16°.4 | 3380 | 2 | 13°.97 | −17°.0 |
| 2981′ | 2 | 14.13 | −16.5 | 3213 | 4 | 14.82 | −16.8 | 3386 | 2 | 14.88 | −18.3 |
| 2987 | 2 | 14.60 | −15.3 | 3231 | 3 | 14.34 | −16.7 | 3411 | 2 | 15.14 | −16.4 |
| 2988 | 2 | 14.80 | −15.4 | 3233 | 2 | 14.34 | −17.4 | 3412 | 2 | 15.24 | −19.7 |
| 2996 | 4 | 14.08 | −17.3 | 3234 | 2 | 14.21 | −15.0 | 3414 | 2 | 14.17 | −15.2 |
| 2998 | 2 | 13.62 | −18.6 | 3235 | 2 | 13.16 | −18.9 | 3464 | 2 | 14.45 | −17.4 |
| 3035 | 2 | 14.38 | −16.9 | 3238 | 2 | 14.47 | −19.8 | 3465 | 3 | 14.17 | −16.4 |
| 3038 | 2 | 13.89 | −18.6 | 3246 | 2 | 13.03 | −19.8 | 3502 | 3 | 14.22 | −17.6 |
| 3055 | 2 | 15.73 | −19.1 | 3247 | 2 | 14.21 | −15.0 | 3503 | 2 | 15.21 | −19.3 |
| 3056 | 2 | 14.33 | −20.0 | 3251 | 2 | 13.16 | −16.6 | 3511 | 2 | 14.38 | −18.0 |
| 3057 | 3 | 14.19 | −15.3 | 3252 | 2 | 13.16 | −15.2 | 3512 | 2 | 15.40 | −18.3 |
| 3060 | 2 | 15.13 | −19.8 | 3283 | 2 | 14.86 | −16.6 | 3515 | 4 | 14.67 | −15.6 |
| 3061 | 3 | 14.03 | −18.3 | 3284 | 2 | 15.05 | −19.5 | 3516 | 2 | 14.79 | −18.9 |
| 3065 | 2 | 14.93 | −19.7 | 3285 | 2 | 13.95 | −19.7 | 3518 | 3 | 14.21 | −19.3 |
| 3073 | 2 | 15.23 | −20.0 | 3290 | 2 | 14.22 | −19.7 | 3527 | 5 | 14.69 | −15.4 |
| 3074 | 2 | 13.70 | −16.8 | 3291 | 2 | 13.77 | −16.9 | 3543 | 2 | 14.21 | −18.1 |
| 3075′ | 2 | 14.92 | −19.7 | 3294 | 2 | 13.49 | −18.5 | 3553 | 2 | 14.32 | −17.0 |
| 3077 | 2 | 14.31 | −18.0 | 3297 | 2 | 14.23 | −17.7 | 3571 | 2 | 14.31 | −19.1 |
| 3078 | 2 | 15.13 | −19.9 | 3300 | 2 | 14.87 | −18.2 | 3577 | 3 | 13.86 | −17.2 |
| 3085 | 2 | 14.31 | −16.8 | 3316 | 2 | 14.44 | −17.6 | 3589 | 2 | 14.38 | −19.4 |
| 3086 | 2 | 14.31 | −16.2 | 3323 | 2 | 14.34 | −17.9 | 3593 | 2 | 14.08 | −18.5 |
| 3102 | 4 | 14.73 | −18.3 | 3324 | 2 | 14.34 | −18.0 | 3625 | 2 | 14.45 | −17.3 |
| 3106 | 2 | 13.82 | −18.8 | 3326 | 2 | 14.12 | −18.3 | 3626 | 2 | 14.16 | −16.3 |
| 3122 | 3 | 14.24 | −18.9 | 3337 | 4 | 14.45 | −16.9 | 3640 | 4 | 14.88 | −16.4 |
| 3144 | 2 | 14.80 | −18.2 | 3338 | 4 | 14.50 | −18.6 | 3658 | 2 | 14.96 | −16.8 |
| 3145 | 2 | 13.92 | −16.6 | 3347 | 2 | 14.87 | −18.5 | 3661 | 2 | 14.46 | −17.5 |
| 3146 | 2 | 13.72 | −18.7 | 3348 | 3 | 14.94 | −19.8 | 3688 | 4 | 13.86 | −19.4 |
| 3152 | 2 | 14.41 | −16.0 | 3351 | 2 | 14.61 | −16.6 | 3716 | 5 | 14.18 | −15.5 |
| 3153 | 2 | 14.30 | −16.6 | 3352 | 4 | 14.12 | −18.7 | 3721 | 4 | 13.82 | −17.8 |
| 3157 | 2 | 14.20 | −19.2 | 3353 | 3 | 14.54 | −16.1 | 3722 | 2 | 14.70 | −19.6 |
| 3162 | 2 | 14.10 | −19.2 | 3357 | 3 | 14.96 | −18.7 | 3723 | 2 | 14.20 | −18.2 |
| 3166 | 2 | 13.78 | −18.9 | 3358 | 3 | 15.21 | −15.0 | 3736 | 2 | 14.11 | −16.9 |
| 3186 | 2 | 15.79 | −19.3 | 3359 | 2 | 14.61 | −15.4 | 3751 | 2 | 13.90 | −19.7 |
| 3187 | 2 | 14.18 | −15.0 | 3343′ | 2 | 14.23 | −17.1 | 3774 | 3 | 14.08 | −19.6 |
| 3188 | 2 | 14.68 | −18.8 | 3345′ | 2 | 14.03 | −19.3 | 3809 | 2 | 14.57 | −16.6 |
| 3193 | 2 | 14.98 | −17.0 | 3346′ | 2 | 13.61 | −19.3 | 3810 | 2 | 14.77 | −16.1 |
| 3202 | 3 | 14.17 | −19.2 | 3347′ | 2 | 13.92 | −15.1 | 3811 | 2 | 15.27 | −16.5 |
| 3203 | 3 | 14.37 | −19.2 | 3355′ | 2 | 14.13 | −19.4 | | | | |
| 3204 | 2 | 14.48 | −16.6 | 3379 | 3 | 15.21 | −18.5 | | | | |

TABLE II—*Continued*

Zone 20° to 25° { Mean Latitude = +22°.22
Mean Diurnal Motion = 14°.05

| Number | Days | Diurnal Motion Sidereal | Heliographic Latitude | Number | Days | Diurnal Motion Sidereal | Heliographic Latitude | Number | Days | Diurnal Motion Sidereal | Heliographic Latitude |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 45 | 2 | 14°.35 | 23°.5 | 346 | 2 | 13°.47 | 21°.1 | 916 | 2 | 14°.23 | 22°.6 |
| 47 | 2 | 14.73 | 20.0 | 347 | 2 | 14.03 | 20.8 | 919 | 2 | 14.23 | 24.5 |
| 49 | 2 | 14.22 | 22.3 | 348 | 2 | 15.03 | 21.0 | 920 | 2 | 13.13 | 24.8 |
| 62 | 2 | 13.88 | 21.9 | 366 | 2 | 13.90 | 21.5 | 967 | 3 | 13.92 | 22.6 |
| 63 | 2 | 13.37 | 24.0 | 367 | 2 | 14.12 | 20.4 | 991 | 2 | 13.50 | 22.1 |
| 65 | 2 | 14.13 | 23.4 | 368 | 2 | 14.09 | 23.7 | 998 | 2 | 14.40 | 21.7 |
| 66 | 2 | 14.64 | 20.9 | 372 | 2 | 13.69 | 20.2 | 999 | 2 | 13.90 | 22.2 |
| 68 | 2 | 13.74 | 24.3 | 378 | 2 | 14.01 | 24.8 | 1006 | 3 | 13.32 | 24.8 |
| 74 | 2 | 13.74 | 22.2 | 395 | 4 | 14.06 | 20.6 | 1015 | 3 | 14.63 | 23.5 |
| 75 | 2 | 13.62 | 24.0 | 396 | 2 | 14.35 | 22.0 | 1016 | 3 | 12.62 | 22.2 |
| 88 | 3 | 13.93 | 24.2 | 397 | 2 | 13.87 | 22.7 | 1018 | 3 | 13.32 | 24.4 |
| 89 | 3 | 13.89 | 20.5 | 411 | 3 | 13.51 | 21.0 | 1025 | 4 | 14.05 | 20.9 |
| 90 | 2 | 13.24 | 24.8 | 428 | 6 | 13.56 | 22.0 | 1045 | 2 | 14.12 | 23.2 |
| 99 | 3 | 14.61 | 22.1 | 429 | 2 | 13.50 | 20.2 | 1047 | 2 | 14.83 | 20.8 |
| 100 | 3 | 14.78 | 23.2 | 431 | 2 | 13.40 | 23.5 | 1072 | 2 | 13.26 | 22.9 |
| 101 | 3 | 14.21 | 25.0 | 432 | 2 | 14.01 | 21.5 | 1088 | 3 | 14.60 | 20.4 |
| 109 | 2 | 14.38 | 22.6 | 435 | 2 | 12.88 | 22.9 | 1090 | 4 | 13.98 | 20.9 |
| 110 | 2 | 14.11 | 20.1 | 437 | 2 | 14.14 | 22.0 | 1092 | 4 | 14.02 | 22.8 |
| 118 | 2 | 14.51 | 23.0 | 440 | 2 | 14.90 | 21.0 | 1093 | 4 | 14.28 | 21.1 |
| 124 | 2 | 13.58 | 22.5 | 441 | 2 | 13.76 | 24.5 | 1094 | 4 | 14.34 | 20.1 |
| 131 | 3 | 14.42 | 20.3 | 444 | 4 | 14.08 | 20.6 | 1096 | 2 | 14.88 | 22.1 |
| 133 | 3 | 13.76 | 22.1 | 445 | 2 | 14.40 | 21.0 | 1131 | 2 | 13.94 | 23.9 |
| 134 | 3 | 14.65 | 24.0 | 446 | 2 | 14.65 | 21.5 | 1134 | 2 | 13.57 | 24.0 |
| 135 | 2 | 14.36 | 24.5 | 447 | 2 | 14.78 | 23.4 | 1138 | 2 | 13.97 | 23.8 |
| 136 | 3 | 14.34 | 20.7 | 453 | 2 | 15.03 | 21.3 | 1187 | 2 | 15.78 | 24.4 |
| 137 | 3 | 14.10 | 20.8 | 454 | 2 | 14.78 | 21.5 | 1196 | 3 | 13.94 | 20.9 |
| 139 | 2 | 14.09 | 23.1 | 455 | 2 | 14.52 | 20.2 | 1219 | 2 | 14.65 | 21.1 |
| 140 | 3 | 13.82 | 23.1 | 458 | 4 | 14.43 | 20.0 | 1220 | 2 | 14.75 | 21.6 |
| 149 | 3 | 14.43 | 23.2 | 476 | 2 | 14.15 | 23.2 | 1222 | 2 | 14.35 | 21.8 |
| 150 | 2 | 13.83 | 22.1 | 490 | 2 | 14.13 | 23.2 | 1235 | 2 | 14.35 | 22.7 |
| 151 | 3 | 13.83 | 20.3 | 491 | 2 | 14.13 | 20.8 | 1236 | 2 | 13.44 | 20.8 |
| 152 | 3 | 13.82 | 21.6 | 496 | 2 | 15.02 | 20.4 | 1239 | 2 | 13.84 | 21.3 |
| 157 | 2 | 14.36 | 22.9 | 498 | 2 | 14.13 | 20.6 | 1248 | 4 | 14.31 | 24.0 |
| 158 | 3 | 14.81 | 22.4 | 500 | 2 | 13.64 | 21.2 | 1249 | 4 | 14.33 | 22.8 |
| 160 | 2 | 14.75 | 22.6 | 503 | 2 | 14.73 | 20.1 | 1255 | 4 | 14.01 | 21.2 |
| 169 | 2 | 13.57 | 22.8 | 508 | 2 | 14.31 | 22.6 | 1271 | 2 | 13.95 | 25.0 |
| 187 | 2 | 14.74 | 20.8 | 540 | 2 | 14.01 | 22.0 | 1344 | 2 | 13.95 | 20.9 |
| 188 | 2 | 14.43 | 23.2 | 541 | 2 | 13.80 | 23.0 | 1359 | 7 | 13.94 | 21.9 |
| 20 | 3 | 14.64 | 20.0 | 542 | 2 | 14.65 | 23.5 | 1360 | 5 | 14.15 | 22.4 |
| 21 | 3 | 13.82 | 20.2 | 574 | 2 | 13.69 | 21.1 | 1362 | 3 | 14.52 | 22.2 |
| 22 | 2 | 14.24 | 22.5 | 575 | 2 | 13.37 | 23.6 | 1363 | 2 | 13.44 | 25.0 |
| 29 | 2 | 14.60 | 20.4 | 606 | 2 | 13.83 | 20.8 | 1364 | 2 | 12.64 | 20.2 |
| 34 | 2 | 13.52 | 23.2 | 607 | 6 | 14.23 | 21.7 | 1365 | 3 | 15.08 | 23.7 |
| 35 | 2 | 14.24 | 22.9 | 611 | 2 | 14.04 | 20.9 | 1369 | 2 | 13.74 | 21.2 |
| 32 | 2 | 14.13 | 22.3 | 612 | 2 | 14.15 | 23.2 | 1371 | 4 | 14.21 | 22.6 |
| 33 | 2 | 14.68 | 23.5 | 624 | 2 | 13.54 | 24.4 | 1372 | 3 | 13.81 | 23.3 |
| 192 | 2 | 14.45 | 22.0 | 625 | 3 | 14.03 | 21.7 | 1387 | 4 | 14.21 | 24.2 |
| 198 | 2 | 15.06 | 20.8 | 643 | 2 | 14.26 | 24.2 | 1388 | 4 | 13.62 | 22.9 |
| 200 | 2 | 13.83 | 25.0 | 651 | 2 | 14.63 | 21.5 | 1389 | 4 | 14.33 | 21.3 |
| 203 | 2 | 13.46 | 20.5 | 653 | 2 | 13.94 | 24.6 | 1390 | 2 | 13.84 | 20.2 |
| 204 | 2 | 13.96 | 24.9 | 664 | 3 | 14.17 | 22.6 | 1391 | 4 | 14.29 | 24.6 |
| 207 | 2 | 13.71 | 21.2 | 745 | 2 | 14.29 | 22.7 | 1413 | 2 | 14.12 | 23.6 |
| 228 | 2 | 13.75 | 23.1 | 746 | 2 | 14.19 | 22.9 | 1423 | 3 | 14.19 | 21.1 |
| 250 | 2 | 13.57 | 21.8 | 759 | 2 | 14.71 | 20.6 | 1424 | 3 | 13.58 | 24.0 |
| 251 | 2 | 14.12 | 20.2 | 767 | 2 | 14.23 | 22.4 | 1437 | 2 | 13.99 | 21.8 |
| 256 | 2 | 14.12 | 22.8 | 774 | 2 | 14.33 | 22.1 | 1449 | 2 | 14.08 | 20.3 |
| 280 | 3 | 14.18 | 22.3 | 786 | 2 | 14.13 | 23.0 | 1460 | 2 | 12.88 | 21.5 |
| 285 | 3 | 13.83 | 23.5 | 794 | 4 | 14.11 | 23.6 | 1506 | 3 | 14.04 | 22.5 |
| 301 | 2 | 14.08 | 22.2 | 803 | 2 | 14.05 | 25.0 | 1512 | 3 | 13.74 | 21.1 |
| 308 | 4 | 14.04 | 21.9 | 863 | 3 | 13.96 | 22.3 | 1529 | 2 | 13.56 | 20.9 |
| 309 | 4 | 14.33 | 20.5 | 864 | 3 | 14.16 | 20.1 | 1530 | 2 | 14.22 | 21.5 |
| 318 | 4 | 14.00 | 21.8 | 866 | 4 | 13.62 | 22.7 | 1531 | 2 | 14.40 | 21.2 |
| 319 | 2 | 13.97 | 21.6 | 867 | 2 | 14.38 | 24.3 | 1551 | 2 | 15.14 | 23.5 |
| 325 | 2 | 13.97 | 20.8 | 893 | 5 | 13.59 | 23.2 | 1552 | 2 | 13.95 | 22.0 |
| 330 | 3 | 13.47 | 20.9 | 896 | 3 | 13.81 | 23.7 | 1555 | 2 | 14.25 | 20.5 |
| 334 | 3 | 14.27 | 24.5 | 899 | 3 | 13.81 | 21.4 | 1564 | 3 | 13.53 | 20.5 |
| 337 | 2 | 14.13 | 20.5 | 901 | 4 | 13.80 | 24.5 | 1568 | 3 | 13.88 | 21.8 |
| 341 | 2 | 14.48 | 24.8 | 915 | 2 | 14.43 | 20.4 | 1596 | 4 | 13.95 | 24.9 |

TABLE II—*Continued*

Zone 20° to 25°—*Continued*

| Number | Days | Diurnal Motion Sidereal | Heliographic Latitude | Number | Days | Diurnal Motion Sidereal | Heliographic Latitude | Number | Days | Diurnal Motion Sidereal | Heliographic Latitude |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1602 | 4 | 13°.91 | 24°.3 | 1869 | 2 | 13°.41 | 23°.9 | 2200 | 4 | 13°.96 | 20°.8 |
| 1605 | 3 | 14.01 | 25.0 | 1870 | 2 | 14.23 | 21.9 | 2206 | 3 | 13.11 | 22.3 |
| 1606 | 3 | 13.26 | 24.1 | 1871 | 2 | 13.62 | 23.0 | 2210 | 3 | 14.06 | 21.6 |
| 1624 | 3 | 14.09 | 21.4 | 1909 | 2 | 14.36 | 21.6 | 2211 | 3 | 13.31 | 20.2 |
| 1629 | 3 | 13.51 | 22.3 | 1910 | 2 | 13.60 | 20.8 | 2224 | 2 | 14.27 | 23.8 |
| 1630 | 3 | 14.10 | 22.1 | 1923 | 2 | 13.89 | 20.0 | 2233 | 2 | 13.72 | 20.3 |
| 1631 | 3 | 14.01 | 20.8 | 1924 | 2 | 14.27 | 21.8 | 2262 | 4 | 13.85 | 21.5 |
| 1632 | 3 | 14.50 | 24.2 | 1928 | 2 | 13.41 | 21.3 | 2263 | 4 | 14.26 | 24.5 |
| 1641 | 2 | 13.54 | 20.5 | 1966 | 2 | 14.31 | 23.7 | 2385 | 2 | 14.02 | 20.0 |
| 1647 | 2 | 13.24 | 21.7 | 1972 | 2 | 14.77 | 23.3 | 2393 | 4 | 13.58 | 20.8 |
| 1648 | 2 | 13.64 | 21.7 | 1974 | 2 | 14.25 | 20.1 | 2394 | 2 | 12.97 | 23.2 |
| 1677 | 2 | 14.13 | 20.1 | 1977 | 4 | 14.13 | 21.1 | 2572 | 2 | 13.72 | 25.0 |
| 1682 | 3 | 14.14 | 21.5 | 1978 | 6 | 13.81 | 24.4 | 2584 | 3 | 13.84 | 22.7 |
| 1684 | 3 | 14.09 | 25.0 | 1986 | 3 | 13.67 | 23.2 | 2585 | 3 | 13.90 | 21.8 |
| 1686 | 2 | 13.72 | 24.6 | 1987 | 2 | 14.46 | 24.3 | 2637 | 2 | 14.18 | 20.9 |
| 1692 | 3 | 13.43 | 23.0 | 2003 | 3 | 13.71 | 24.4 | 2638 | 2 | 14.51 | 23.8 |
| 1693 | 2 | 14.44 | 23.5 | 2011 | 6 | 13.84 | 23.1 | 2664 | 3 | 13.92 | 22.4 |
| 1694 | 3 | 14.34 | 20.9 | 2017 | 2 | 13.85 | 22.4 | 2749 | 2 | 13.77 | 21.8 |
| 1695 | 3 | 14.50 | 20.1 | 2020 | 4 | 13.99 | 20.0 | 2750 | 2 | 13.39 | 20.0 |
| 1697 | 3 | 13.84 | 20.7 | 2036 | 4 | 14.02 | 23.7 | 2822 | 2 | 13.64 | 21.1 |
| 1720 | 2 | 13.75 | 21.3 | 2060 | 4 | 13.96 | 22.4 | 2839 | 2 | 13.69 | 23.8 |
| 1754 | 2 | 14.49 | 21.5 | 2061 | 2 | 14.59 | 21.5 | 3217 | 2 | 14.04 | 20.4 |
| 1757 | 2 | 13.79 | 22.4 | 2063 | 2 | 14.59 | 22.7 | 3258 | 2 | 13.55 | 21.6 |
| 1758 | 2 | 13.49 | 22.3 | 2123 | 2 | 13.88 | 23.7 | 3266 | 2 | 14.07 | 20.3 |
| 1760 | 2 | 13.09 | 21.9 | 2125 | 2 | 13.62 | 21.9 | 3307 | 2 | 14.76 | 21.9 |
| 1815 | 2 | 14.34 | 24.3 | 2126 | 2 | 14.65 | 20.5 | 3393 | 5 | 14.02 | 20.9 |
| 1816 | 2 | 14.14 | 20.0 | 2128 | 2 | 13.37 | 20.7 | 3416 | 4 | 14.09 | 21.1 |
| 1817 | 2 | 14.14 | 22.1 | 2131 | 2 | 14.13 | 23.7 | 3437 | 2 | 14.33 | 23.5 |
| 1818 | 2 | 14.64 | 23.1 | 2132 | 3 | 14.02 | 21.0 | 3534 | 2 | 13.84 | 21.3 |
| 1820 | 2 | 14.04 | 20.7 | 2133 | 2 | 15.29 | 21.2 | 3562 | 2 | 13.63 | 20.8 |
| 1821 | 2 | 14.14 | 20.4 | 2148 | 2 | 14.06 | 21.1 | 3597 | 2 | 13.88 | 21.7 |
| 1823 | 2 | 14.14 | 22.3 | 2154 | 2 | 13.47 | 20.2 | 3604 | 2 | 13.98 | 21.1 |
| 1824 | 2 | 14.74 | 24.9 | 2155 | 2 | 14.86 | 23.9 | 3636 | 2 | 13.76 | 23.3 |
| 1828 | 2 | 13.94 | 22.7 | 2162 | 2 | 14.35 | 21.6 | 3698 | 3 | 14.13 | 22.0 |
| 1829 | 2 | 14.84 | 24.6 | 2188 | 4 | 14.00 | 20.0 | 3719 | 2 | 14.07 | 21.0 |
| 1867 | 2 | 14.23 | 23.3 | 2199 | 4 | 13.78 | 21.3 | | | | |

TABLE II—*Continued*

Zone −20° to −25° { Mean Latitude = −22°.19
Mean Diurnal Motion = 14°.19

| Number | Days | Diurnal Motion Sidereal | Heliographic Latitude | Number | Days | Diurnal Motion Sidereal | Heliographic Latitude | Number | Days | Diurnal Motion Sidereal | Heliographic Latitude |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 38 | 2 | 14°.99 | −23°.0 | 633 | 2 | 14°.20 | −23°.5 | 1233 | 2 | 13°.14 | −23°.5 |
| 50 | 2 | 14.73 | −23.8 | 634 | 2 | 13.72 | −22.9 | 1256 | 4 | 14.98 | −24.7 |
| 51 | 2 | 14.48 | −25.0 | 635 | 2 | 14.49 | −22.2 | 1257 | 4 | 14.56 | −21.2 |
| 52 | 2 | 13.20 | −21.9 | 680 | 3 | 14.11 | −21.6 | 1261 | 4 | 13.99 | −24.5 |
| 57 | 2 | 14.89 | −22.2 | 682 | 2 | 14.18 | −22.8 | 1262 | 4 | 14.19 | −24.0 |
| 71 | 2 | 15.14 | −20.2 | 703 | 2 | 15.84 | −20.7 | 1264 | 4 | 14.40 | −20.5 |
| 72 | 3 | 14.58 | −21.3 | 729 | 3 | 14.21 | −20.0 | 1266 | 2 | 14.05 | −22.6 |
| 79 | 2 | 14.40 | −20.0 | 730 | 3 | 13.36 | −23.6 | 1268 | 2 | 16.35 | −24.8 |
| 114 | 2 | 14.24 | −24.0 | 731 | 4 | 14.22 | −20.7 | 1269 | 2 | 15.75 | −24.4 |
| 178 | 2 | 13.61 | −22.4 | 732 | 4 | 14.49 | −20.8 | 1280 | 2 | 15.65 | −22.3 |
| 4 | 3 | 14.28 | −23.9 | 741 | 3 | 14.50 | −22.9 | 1281 | 2 | 14.65 | −21.3 |
| 6 | 2 | 14.24 | −23.9 | 749 | 2 | 13.79 | −23.1 | 1284 | 2 | 14.65 | −22.9 |
| 7 | 2 | 14.33 | −24.3 | 761 | 2 | 13.93 | −24.0 | 1285 | 2 | 14.25 | −20.0 |
| 8 | 2 | 14.06 | −20.6 | 762 | 2 | 13.63 | −23.1 | 1286 | 2 | 13.55 | −23.7 |
| 9 | 2 | 13.61 | −20.2 | 765 | 2 | 14.84 | −22.8 | 1290 | 2 | 14.47 | −22.8 |
| 10 | 2 | 14.15 | −22.6 | 779 | 2 | 14.13 | −20.6 | 1291 | 3 | 13.59 | −24.7 |
| 12 | 3 | 14.05 | −22.3 | 780 | 2 | 13.83 | −22.9 | 1294 | 3 | 14.03 | −22.8 |
| 30 | 2 | 14.31 | −24.1 | 787 | 2 | 14.03 | −23.6 | 1295 | 3 | 14.08 | −22.9 |
| 219 | 2 | 14.08 | −22.2 | 811 | 2 | 13.54 | −24.7 | 1300 | 2 | 13.18 | −22.7 |
| 235 | 2 | 14.40 | −20.8 | 821 | 2 | 14.30 | −24.4 | 1334 | 3 | 13.42 | −24.0 |
| 243 | 3 | 14.39 | −20.0 | 822 | 4 | 14.59 | −20.5 | 1335 | 3 | 13.82 | −24.6 |
| 245 | 3 | 14.73 | −20.3 | 826 | 2 | 14.48 | −21.5 | 1381 | 3 | 14.32 | −20.5 |
| 246 | 2 | 13.94 | −21.4 | 848 | 3 | 13.95 | −22.3 | 1383 | 4 | 14.26 | −21.5 |
| 254 | 2 | 13.57 | −21.6 | 856 | 6 | 14.52 | −22.1 | 1384 | 4 | 14.10 | −20.6 |
| 255 | 3 | 13.90 | −20.9 | 878 | 3 | 14.68 | −24.4 | 1399 | 2 | 14.51 | −20.4 |
| 266 | 3 | 14.04 | −21.7 | 880 | 3 | 14.20 | −21.3 | 1400 | 2 | 14.22 | −20.0 |
| 263 | 2 | 14.08 | −20.6 | 883 | 3 | 14.29 | −25.0 | 1404 | 2 | 14.12 | −23.8 |
| 264 | 2 | 13.87 | −21.7 | 884 | 3 | 14.06 | −22.1 | 1427 | 3 | 14.55 | −20.7 |
| 265 | 2 | 14.91 | −20.8 | 887 | 2 | 14.05 | −21.2 | 1435 | 3 | 14.24 | −23.8 |
| 276 | 2 | 15.11 | −20.1 | 894 | 2 | 14.33 | −21.2 | 1464 | 2 | 13.81 | −21.1 |
| 281 | 3 | 12.82 | −22.6 | 904 | 4 | 14.19 | −21.0 | 1474 | 3 | 13.32 | −21.5 |
| 291 | 2 | 13.65 | −22.1 | 906 | 3 | 13.62 | −20.8 | 1481 | 3 | 13.65 | −23.2 |
| 292 | 2 | 14.19 | −24.0 | 925 | 2 | 14.53 | −22.5 | 1482 | 3 | 14.57 | −20.5 |
| 293 | 2 | 14.84 | −23.1 | 927 | 2 | 14.53 | −22.1 | 1483 | 2 | 13.55 | −24.2 |
| 331 | 3 | 14.34 | −22.9 | 930 | 2 | 14.43 | −23.8 | 1484 | 3 | 14.48 | −22.0 |
| 420 | 2 | 13.91 | −21.5 | 931 | 2 | 14.03 | −24.8 | 1489 | 3 | 14.62 | −24.2 |
| 436 | 6 | 14.17 | −22.5 | 946 | 2 | 13.05 | −24.3 | 1490 | 3 | 14.34 | −23.2 |
| 459 | 2 | 14.14 | −24.8 | 948 | 2 | 13.65 | −21.1 | 1491 | 2 | 14.84 | −20.3 |
| 461 | 4 | 13.80 | −22.3 | 951 | 2 | 13.25 | −24.7 | 1493 | 2 | 13.85 | −24.1 |
| 462 | 4 | 14.01 | −20.5 | 953 | 2 | 13.95 | −20.0 | 1474′ | 2 | 13.56 | −20.6 |
| 466 | 3 | 14.69 | −20.2 | 955 | 3 | 14.12 | −21.3 | 1518 | 2 | 13.56 | −21.3 |
| 468 | 3 | 14.84 | −23.3 | 956 | 3 | 13.87 | −20.6 | 1576 | 5 | 14.10 | −24.9 |
| 469 | 3 | 14.09 | −23.6 | 1052 | 3 | 13.98 | −20.3 | 1578 | 3 | 14.08 | −22.9 |
| 470 | 2 | 14.55 | −23.4 | 1053 | 3 | 14.27 | −22.1 | 1592 | 2 | 14.79 | −21.7 |
| 471 | 2 | 14.65 | −22.9 | 1054 | 3 | 14.77 | −23.9 | 1655 | 2 | 14.03 | −22.1 |
| 478 | 2 | 14.05 | −24.5 | 1075 | 2 | 14.04 | −22.3 | 1663 | 2 | 13.73 | −21.4 |
| 501 | 2 | 14.52 | −24.8 | 1081 | 2 | 13.75 | −23.3 | 1666 | 2 | 13.24 | −23.9 |
| 502 | 2 | 14.43 | −21.2 | 1104 | 2 | 14.88 | −23.0 | 1703 | 3 | 14.75 | −20.6 |
| 520 | 2 | 14.20 | −23.5 | 1105 | 4 | 13.90 | −23.6 | 1717 | 3 | 14.40 | −21.7 |
| 528 | 2 | 13.99 | −21.3 | 1107 | 4 | 14.11 | −22.1 | 1727 | 2 | 13.75 | −20.0 |
| 547 | 2 | 13.90 | −24.1 | 1109 | 4 | 13.99 | −24.2 | 1728 | 2 | 13.75 | −22.0 |
| 548 | 2 | 13.80 | −22.7 | 1121 | 4 | 14.54 | −20.1 | 1730 | 2 | 14.15 | −21.2 |
| 551 | 2 | 14.33 | −23.1 | 1122 | 4 | 13.87 | −23.1 | 1743 | 2 | 14.49 | −22.0 |
| 552 | 2 | 13.90 | −22.8 | 1143 | 2 | 14.27 | −22.1 | 1744 | 2 | 13.99 | −20.4 |
| 556 | 2 | 14.87 | −22.8 | 1144 | 2 | 14.77 | −21.4 | 1746 | 2 | 14.19 | −22.1 |
| 557 | 2 | 14.65 | −23.6 | 1153 | 2 | 13.87 | −21.7 | 1765 | 2 | 14.09 | −20.9 |
| 561 | 2 | 14.98 | −23.1 | 1154 | 2 | 12.57 | −21.4 | 1770 | 2 | 12.59 | −20.5 |
| 563 | 2 | 13.48 | −21.1 | 1158 | 2 | 14.10 | −21.7 | 1775 | 2 | 13.52 | −24.4 |
| 564 | 2 | 13.90 | −22.5 | 1163 | 2 | 12.74 | −21.5 | 1776 | 2 | 14.39 | −21.1 |
| 566 | 2 | 14.01 | −21.0 | 1197 | 3 | 14.42 | −20.0 | 1783 | 2 | 14.20 | −21.7 |
| 570 | 2 | 14.44 | −20.5 | 1198 | 3 | 14.25 | −20.5 | 1784 | 2 | 14.10 | −21.9 |
| 576 | 2 | 14.47 | −23.0 | 1202 | 3 | 14.95 | −24.4 | 1786 | 2 | 14.59 | −20.1 |
| 586 | 2 | 14.04 | −24.9 | 1204 | 3 | 14.95 | −21.0 | 1788 | 2 | 14.10 | −22.0 |
| 588 | 3 | 13.57 | −22.2 | 1206 | 3 | 13.83 | −24.5 | 1873 | 2 | 14.23 | −24.6 |
| 591 | 3 | 13.73 | −22.5 | 1228 | 2 | 14.75 | −20.9 | 1875 | 2 | 14.53 | −21.9 |
| 595 | 3 | 13.88 | −20.4 | 1229 | 2 | 14.35 | −22.3 | 1877 | 2 | 13.62 | −23.4 |
| 615 | 2 | 14.57 | −21.2 | 1231 | 2 | 14.15 | −22.5 | 1878 | 2 | 13.92 | −23.6 |
| 621 | 3 | 13.77 | −23.1 | 1232 | 2 | 13.34 | −20.5 | 1889 | 2 | 14.23 | −21.9 |

TABLE II—*Continued*

Zone −20° to −25°—*Continued*

| Number | Days | Diurnal Motion Sidereal | Heliographic Latitude | Number | Days | Diurnal Motion Sidereal | Heliographic Latitude | Number | Days | Diurnal Motion Sidereal | Heliographic Latitude |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1893 | 2 | 14°08 | −20°6 | 2517 | 2 | 14°69 | −24°2 | 3161 | 2 | 13°58 | −23°3 |
| 1894 | 2 | 13.79 | −20.3 | 2518 | 2 | 14.21 | −21.8 | 3167 | 2 | 13.68 | −22.1 |
| 1895 | 2 | 13.98 | −23.9 | 2521 | 2 | 13.92 | −21.2 | 3168 | 2 | 13.27 | −20.2 |
| 1930 | 2 | 14.31 | −23.1 | 2532 | 6 | 14.22 | −21.7 | 3191 | 2 | 15.79 | −24.5 |
| 1990 | 3 | 13.87 | −20.1 | 2558 | 3 | 14.27 | −21.8 | 3192 | 5 | 14.06 | −24.5 |
| 1993 | 2 | 14.15 | −20.3 | 2561 | 2 | 14.27 | −21.1 | 3205 | 2 | 14.28 | −22.4 |
| 1995 | 2 | 14.66 | −23.0 | 2586 | 2 | 13.17 | −23.6 | 3214 | 2 | 14.79 | −22.8 |
| 2014 | 3 | 14.01 | −22.3 | 2587 | 2 | 14.83 | −21.4 | 3215 | 2 | 12.75 | −21.0 |
| 2030 | 4 | 12.98 | −21.5 | 2597 | 2 | 14.42 | −23.1 | 3237 | 2 | 13.81 | −21.5 |
| 2032 | 3 | 13.62 | −23.3 | 2598 | 4 | 14.34 | −23.4 | 3239 | 2 | 13.29 | −21.5 |
| 2065 | 2 | 14.38 | −22.4 | 2601 | 3 | 15.07 | −21.5 | 3240 | 2 | 14.47 | −23.1 |
| 2087 | 3 | 13.73 | −23.5 | 2615 | 2 | 15.03 | −21.5 | 3241 | 2 | 13.16 | −24.8 |
| 2090 | 3 | 13.89 | −23.3 | 2617 | 2 | 14.71 | −20.4 | 3244 | 2 | 13.81 | −23.5 |
| 2091 | 4 | 14.14 | −21.1 | 2736 | 2 | 14.71 | −23.0 | 3245 | 2 | 13.29 | −20.1 |
| 2096 | 2 | 14.39 | −20.1 | 2742 | 2 | 14.03 | −22.3 | 3292 | 2 | 13.86 | −20.7 |
| 2097 | 4 | 14.44 | −23.2 | 2743 | 4 | 14.28 | −20.6 | 3293 | 2 | 14.41 | −20.9 |
| 2100 | 4 | 13.86 | −22.2 | 2745 | 4 | 14.62 | −24.6 | 3295 | 2 | 14.50 | −21.0 |
| 2139 | 2 | 13.49 | −20.7 | 2746 | 4 | 14.19 | −21.1 | 3299 | 2 | 14.76 | −20.2 |
| 2145 | 3 | 15.08 | −21.1 | 2754 | 2 | 13.87 | −21.0 | 3325 | 2 | 14.02 | −20.7 |
| 2150 | 2 | 14.73 | −24.9 | 2788 | 3 | 14.98 | −20.8 | 3349 | 3 | 14.85 | −23.9 |
| 2153 | 2 | 14.48 | −21.7 | 2816 | 2 | 14.33 | −21.7 | 3350 | 3 | 14.20 | −22.1 |
| 2176 | 2 | 13.26 | −24.1 | 2817 | 2 | 14.23 | −21.3 | 3344′ | 2 | 14.13 | −23.0 |
| 2177 | 2 | 14.18 | −21.2 | 2877 | 3 | 14.47 | −22.5 | 3387 | 4 | 14.61 | −21.7 |
| 2179 | 2 | 15.10 | −20.8 | 2881 | 3 | 14.37 | −23.3 | 3388 | 4 | 14.71 | −21.0 |
| 2180 | 2 | 14.59 | −23.7 | 2885 | 2 | 13.91 | −22.7 | 3427 | 2 | 14.67 | −21.6 |
| 2183 | 2 | 14.08 | −24.7 | 2886 | 2 | 14.81 | −24.0 | 3429 | 3 | 14.59 | −21.6 |
| 2265 | 2 | 15.03 | −20.8 | 2933 | 3 | 14.04 | −21.9 | 3467 | 2 | 14.35 | −20.9 |
| 2267 | 2 | 14.84 | −20.6 | 2997 | 2 | 14.41 | −23.9 | 3468 | 3 | 14.12 | −20.3 |
| 2273 | 4 | 13.94 | −22.2 | 3056 | 2 | 14.33 | −20.0 | 3504 | 2 | 13.94 | −23.4 |
| 2274 | 4 | 14.18 | −22.3 | 3058 | 3 | 13.78 | −22.6 | 3517 | 2 | 14.22 | −21.0 |
| 2275 | 4 | 13.94 | −20.2 | 3059 | 2 | 15.13 | −23.5 | 3519 | 3 | 14.01 | −21.1 |
| 2303 | 4 | 14.44 | −21.1 | 3062 | 4 | 14.89 | −21.5 | 3520 | 4 | 14.44 | −20.4 |
| 2305 | 5 | 13.93 | −24.3 | 3063 | 2 | 14.93 | −24.5 | 3521 | 4 | 14.08 | −22.3 |
| 2311 | 3 | 14.53 | −21.0 | 3064 | 3 | 15.15 | −21.9 | 3522 | 2 | 13.94 | −20.1 |
| 2317 | 5 | 13.90 | −20.9 | 3066 | 3 | 14.54 | −22.7 | 3533 | 2 | 14.79 | −23.2 |
| 2330 | 2 | 13.72 | −20.5 | 3072 | 2 | 14.11 | −24.5 | 3544 | 3 | 13.39 | −20.3 |
| 2369 | 2 | 15.08 | −20.8 | 3073 | 2 | 15.23 | −20.0 | 3545 | 3 | 14.93 | −21.9 |
| 2370 | 2 | 14.76 | −20.0 | 3075 | 2 | 14.72 | −20.4 | 3548 | 6 | 14.17 | −20.5 |
| 2374 | 2 | 13.60 | −23.1 | 3099 | 3 | 14.50 | −21.6 | 3549 | 2 | 14.00 | −20.3 |
| 2395 | 2 | 14.44 | −23.8 | 3100 | 3 | 14.24 | −21.2 | 3555 | 2 | 14.12 | −20.2 |
| 2396 | 2 | 14.13 | −23.1 | 3101 | 4 | 14.60 | −21.5 | 3591 | 2 | 13.48 | −23.7 |
| 2407 | 2 | 14.19 | −24.6 | 3103 | 3 | 14.55 | −21.6 | 3627 | 2 | 15.04 | −21.6 |
| 2426 | 2 | 14.49 | −22.9 | 3104 | 3 | 13.86 | −20.7 | 3628 | 2 | 13.27 | −24.7 |
| 2433 | 2 | 14.26 | −21.1 | 3105 | 2 | 14.22 | −21.0 | 3649 | 2 | 13.87 | −22.2 |
| 2461 | 2 | 13.86 | −22.4 | 3120 | 2 | 15.06 | −21.7 | 3733 | 2 | 14.01 | −21.4 |
| 2487 | 3 | 14.46 | −24.1 | 3121 | 3 | 14.22 | −22.4 | 3734 | 5 | 14.29 | −20.6 |
| 2482 | 2 | 14.44 | −22.4 | 3150 | 2 | 14.31 | −23.3 | 3749 | 2 | 14.53 | −21.1 |
| 2490 | 2 | 14.75 | −20.5 | 3155 | 2 | 13.99 | −23.4 | 3754 | 2 | 14.18 | −24.2 |
| 2511 | 5 | 14.28 | −24.2 | 3159 | 2 | 13.37 | −23.8 | 3773 | 3 | 13.16 | −22.9 |
| 2514 | 3 | 13.93 | −21.5 | 3160 | 2 | 12.85 | −24.7 | | | | |

TABLE II—*Continued*

Zone 25° to 30° { Mean Latitude = +27°.01
Mean Diurnal Motion = 13°.88

| Number | Days | Diurnal Motion Sidereal | Heliographic Latitude | Number | Days | Diurnal Motion Sidereal | Heliographic Latitude | Number | Days | Diurnal Motion Sidereal | Heliographic Latitude |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 46 | 2 | 13°.84 | 27°.3 | 464 | 2 | 14°.52 | 26°.3 | 1271 | 2 | 13°.95 | 25°.0 |
| 54 | 2 | 14.73 | 26.0 | 509 | 2 | 14.20 | 25.9 | 1311 | 2 | 13.97 | 28.5 |
| 55 | 2 | 14.99 | 27.5 | 543 | 2 | 13.16 | 26.9 | 1363 | 2 | 13.44 | 25.0 |
| 64 | 2 | 13.88 | 25.2 | 614 | 2 | 12.87 | 27.8 | 1373 | 4 | 13.76 | 25.9 |
| 67 | 3 | 13.46 | 26.8 | 623 | 3 | 14.67 | 26.3 | 1385 | 4 | 13.66 | 28.4 |
| 77 | 5 | 13.48 | 28.5 | 647 | 4 | 13.34 | 27.0 | 1386 | 2 | 13.84 | 25.3 |
| 87 | 2 | 13.37 | 27.6 | 652 | 2 | 14.34 | 25.5 | 1418 | 3 | 14.45 | 25.3 |
| 91 | 2 | 12.50 | 26.9 | 654 | 2 | 13.84 | 29.4 | 1532 | 2 | 13.47 | 26.7 |
| 92 | 4 | 13.50 | 29.1 | 655 | 2 | 13.74 | 27.9 | 1605 | 3 | 14.01 | 25.0 |
| 93 | 4 | 13.70 | 28.4 | 656 | 2 | 14.53 | 28.6 | 1607 | 3 | 13.86 | 26.5 |
| 101 | 3 | 14.21 | 25.0 | 747 | 2 | 14.79 | 25.6 | 1639 | 3 | 13.71 | 26.2 |
| 103 | 3 | 13.94 | 27.3 | 748 | 2 | 12.38 | 30.0 | 1640 | 3 | 13.86 | 26.3 |
| 104 | 3 | 13.92 | 26.2 | 766 | 2 | 13.73 | 27.7 | 1684 | 3 | 14.09 | 25.0 |
| 126 | 3 | 13.74 | 27.6 | 769 | 2 | 14.13 | 25.2 | 1685 | 3 | 13.99 | 27.0 |
| 107 | 2 | 13.58 | 26.6 | 781 | 2 | 13.73 | 30.0 | 1687 | 3 | 13.48 | 27.5 |
| 123 | 2 | 13.58 | 25.5 | 795 | 4 | 14.32 | 25.7 | 1690 | 2 | 14.44 | 28.6 |
| 141 | 2 | 14.23 | 27.8 | 802 | 2 | 12.41 | 29.2 | 1691 | 3 | 14.14 | 25.3 |
| 142 | 3 | 14.24 | 27.3 | 803 | 2 | 14.05 | 25.0 | 1698 | 3 | 13.84 | 27.7 |
| 146 | 3 | 13.90 | 27.9 | 807 | 2 | 14.05 | 25.2 | 1759 | 2 | 14.59 | 27.2 |
| 147 | 3 | 14.79 | 26.5 | 841 | 4 | 13.98 | 26.3 | 1761 | 2 | 12.89 | 25.3 |
| 148 | 3 | 14.46 | 26.2 | 905 | 4 | 13.51 | 29.1 | 1826 | 2 | 14.14 | 27.1 |
| 159 | 3 | 14.06 | 25.6 | 907 | 4 | 13.79 | 27.4 | 1947 | 2 | 14.21 | 25.2 |
| 166 | 2 | 12.78 | 29.7 | 971 | 3 | 14.57 | 25.5 | 1973 | 2 | 13.33 | 26.0 |
| 23 | 2 | 14.33 | 26.7 | 975 | 2 | 13.65 | 28.4 | 1979 | 2 | 13.95 | 26.8 |
| 24 | 3 | 13.87 | 26.7 | 976 | 2 | 13.65 | 29.8 | 1980 | 2 | 14.05 | 27.6 |
| 199 | 2 | 13.96 | 26.4 | 1007 | 3 | 13.87 | 28.4 | 1988 | 2 | 13.64 | 25.5 |
| 200 | 2 | 13.83 | 25.0 | 1008 | 3 | 14.02 | 28.2 | 1989 | 2 | 14.97 | 27.0 |
| 205 | 2 | 14.08 | 26.7 | 1009 | 3 | 14.02 | 26.0 | 2000 | 2 | 13.49 | 28.0 |
| 206 | 2 | 13.83 | 26.5 | 1013 | 3 | 13.63 | 25.9 | 2001 | 3 | 13.77 | 29.6 |
| 247 | 2 | 13.57 | 29.7 | 1014 | 3 | 13.17 | 29.3 | 2008 | 2 | 13.30 | 28.3 |
| 279 | 2 | 13.87 | 27.5 | 1017 | 3 | 13.87 | 25.5 | 2012 | 6 | 13.01 | 29.7 |
| 324 | 2 | 14.30 | 26.6 | 1019 | 3 | 13.27 | 26.3 | 2016 | 5 | 13.37 | 29.3 |
| 329 | 4 | 13.97 | 26.2 | 1026 | 6 | 13.67 | 26.8 | 2046 | 2 | 13.96 | 29.6 |
| 342 | 2 | 14.03 | 29.0 | 1115 | 2 | 14.15 | 28.0 | 2062 | 4 | 14.39 | 27.0 |
| 349 | 2 | 14.13 | 26.8 | 1125 | 3 | 13.85 | 27.5 | 2124 | 3 | 14.45 | 25.2 |
| 379 | 2 | 14.22 | 27.2 | 1188 | 2 | 13.78 | 26.5 | 2175 | 2 | 13.47 | 30.0 |
| 426 | 2 | 13.40 | 26.9 | 1234 | 2 | 14.75 | 25.2 | 2299 | 4 | 13.73 | 29.4 |
| 438 | 2 | 14.40 | 25.2 | 1237 | 2 | 14.45 | 25.4 | 2572 | 2 | 13.72 | 25.0 |
| 451 | 4 | 14.90 | 27.2 | 1270 | 2 | 13.85 | 25.2 | | | | |

TABLE II—*Continued*

Zone −25° to −30° { Mean Latitude = −27°.28
Mean Diurnal Motion = 14°.05

| Number | Days | Diurnal Motion Sidereal | Heliographic Latitude | Number | Days | Diurnal Motion Sidereal | Heliographic Latitude | Number | Days | Diurnal Motion Sidereal | Heliographic Latitude |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 51 | 2 | 14°.48 | −25°.0 | 939 | 2 | 13°.83 | −25°.8 | 1874 | 2 | 14°.43 | −28°.3 |
| 73 | 3 | 14.62 | −25.1 | 940 | 2 | 14.23 | −26.5 | 1879 | 2 | 13.72 | −25.5 |
| 80 | 3 | 13.77 | −27.6 | 986 | 2 | 12.55 | −26.3 | 1890 | 2 | 14.33 | −27.4 |
| 81 | 2 | 14.38 | −29.9 | 1106 | 3 | 13.59 | −25.5 | 1896 | 2 | 13.89 | −26.3 |
| 82 | 2 | 14.00 | −28.9 | 1108 | 4 | 13.68 | −27.3 | 1897 | 2 | 14.46 | −27.5 |
| 111 | 2 | 14.64 | −27.7 | 1110 | 2 | 13.95 | −27.1 | 1898 | 2 | 14.17 | −28.5 |
| 112 | 2 | 14.77 | −27.2 | 1155 | 2 | 14.73 | −28.0 | 1899 | 2 | 13.22 | −27.3 |
| 115 | 2 | 14.64 | −27.3 | 1156 | 2 | 14.63 | −26.6 | 1931 | 2 | 14.31 | −25.9 |
| 116 | 2 | 13.98 | −29.2 | 1157 | 2 | 13.47 | −25.2 | 1932 | 2 | 14.01 | −27.0 |
| 127 | 3 | 14.12 | −26.2 | 1180 | 2 | 14.52 | −29.6 | 1933 | 2 | 12.31 | −25.8 |
| 128 | 3 | 13.26 | −30.0 | 1181 | 2 | 14.20 | −27.9 | 1934 | 2 | 13.41 | −29.8 |
| 130 | 3 | 13.83 | −28.2 | 1184 | 2 | 14.94 | −28.5 | 1937 | 2 | 13.81 | −27.9 |
| 170 | 3 | 13.38 | −28.6 | 1185 | 2 | 13.99 | −28.3 | 1994 | 3 | 14.04 | −27.0 |
| 181 | 2 | 14.85 | −29.5 | 1192 | 3 | 14.10 | −25.4 | 2181 | 2 | 13.47 | −27.3 |
| 182 | 2 | 13.82 | −28.1 | 1201 | 3 | 15.01 | −25.8 | 2182 | 2 | 14.18 | −29.8 |
| 1 | 2 | 15.06 | −29.2 | 1203 | 3 | 14.76 | −25.4 | 2185 | 2 | 13.37 | −27.1 |
| 2 | 3 | 14.14 | −27.3 | 1205 | 3 | 13.88 | −26.3 | 2186 | 2 | 14.08 | −27.3 |
| 3 | 2 | 14.70 | −28.0 | 1265 | 4 | 14.24 | −25.8 | 2304 | 3 | 15.28 | −25.7 |
| 323 | 2 | 13.76 | −26.0 | 1267 | 2 | 14.85 | −25.7 | 2306 | 3 | 13.88 | −29.5 |
| 352 | 2 | 14.44 | −27.1 | 1275 | 2 | 14.25 | −30.0 | 2307 | 3 | 13.98 | −29.7 |
| 353 | 2 | 14.33 | −27.7 | 1276 | 2 | 13.85 | −28.2 | 2308 | 5 | 14.01 | −29.3 |
| 404 | 2 | 14.02 | −26.4 | 1279 | 2 | 14.65 | −25.9 | 2310 | 3 | 13.93 | −25.6 |
| 406 | 2 | 13.82 | −28.9 | 1292 | 3 | 13.94 | −25.5 | 2343 | 3 | 13.92 | −27.1 |
| 407 | 2 | 13.82 | −25.8 | 1293 | 3 | 13.44 | −28.8 | 2377 | 2 | 14.76 | −25.2 |
| 460 | 4 | 13.32 | −26.6 | 1296 | 3 | 13.74 | −26.1 | 2436 | 2 | 13.86 | −28.6 |
| 467 | 2 | 14.65 | −25.3 | 1297 | 2 | 14.27 | −27.9 | 2499 | 6 | 14.07 | −26.7 |
| 472 | 3 | 13.84 | −25.3 | 1298 | 4 | 14.43 | −26.8 | 2487′ | 2 | 13.38 | −27.3 |
| 558 | 2 | 14.44 | −25.2 | 1299 | 4 | 13.66 | −28.0 | 2555 | 3 | 14.24 | −26.2 |
| 559 | 2 | 14.44 | −29.9 | 1330 | 2 | 14.10 | −29.4 | 2621 | 2 | 15.19 | −26.5 |
| 560 | 2 | 14.01 | −26.1 | 1402 | 2 | 14.61 | −25.8 | 2622 | 2 | 15.19 | −27.3 |
| 567 | 2 | 14.55 | −27.6 | 1405 | 2 | 14.61 | −26.1 | 2644 | 6 | 13.96 | −29.6 |
| 587 | 3 | 14.38 | −30.0 | 1433 | 3 | 14.55 | −25.3 | 2645 | 3 | 14.06 | −28.0 |
| 636 | 2 | 13.82 | −25.6 | 1468 | 2 | 13.81 | −25.4 | 2646 | 3 | 14.34 | −29.6 |
| 644 | 2 | 13.71 | −27.9 | 1488 | 3 | 14.67 | −26.4 | 2879 | 2 | 14.31 | −26.4 |
| 645 | 2 | 13.93 | −28.7 | 1492 | 3 | 14.04 | −25.6 | 2880 | 2 | 15.21 | −28.8 |
| 646 | 2 | 13.71 | −29.5 | 1497 | 2 | 13.75 | −27.2 | 2887 | 2 | 14.51 | −29.7 |
| 701 | 2 | 14.02 | −26.6 | 1498 | 3 | 13.89 | −27.5 | 2937 | 2 | 14.00 | −27.9 |
| 705 | 2 | 13.16 | −27.1 | 1577 | 2 | 12.96 | −29.5 | 3067 | 2 | 15.23 | −26.1 |
| 717 | 2 | 13.74 | −28.1 | 1579 | 5 | 13.24 | −27.2 | 3076 | 2 | 13.19 | −25.7 |
| 742 | 2 | 14.29 | −27.3 | 1582 | 2 | 13.16 | −28.0 | 3158 | 2 | 13.99 | −25.5 |
| 750 | 3 | 13.90 | −29.7 | 1583 | 3 | 12.94 | −27.9 | 3163 | 2 | 14.20 | −27.0 |
| 751 | 3 | 13.70 | −28.0 | 1593 | 2 | 14.30 | −26.2 | 3189 | 2 | 14.58 | −27.8 |
| 753 | 3 | 14.46 | −28.9 | 1594 | 2 | 14.11 | −29.2 | 3190 | 5 | 13.94 | −26.4 |
| 784 | 2 | 14.03 | −26.6 | 1597 | 2 | 14.01 | −25.2 | 3236 | 2 | 13.68 | −29.0 |
| 810 | 2 | 12.92 | −25.4 | 1656 | 2 | 14.03 | −26.8 | 3242 | 2 | 13.55 | −27.4 |
| 820 | 2 | 14.58 | −25.6 | 1657 | 2 | 14.23 | −30.0 | 3243 | 2 | 12.89 | −26.1 |
| 823 | 2 | 14.77 | −29.4 | 1705 | 2 | 14.13 | −25.7 | 3360 | 2 | 14.48 | −29.8 |
| 825 | 2 | 14.39 | −25.6 | 1706 | 2 | 14.03 | −29.7 | 3413 | 2 | 14.85 | −25.1 |
| 847 | 3 | 14.11 | −25.1 | 1726 | 2 | 13.55 | −29.2 | 3523 | 2 | 14.22 | −25.7 |
| 882 | 2 | 13.33 | −26.0 | 1766 | 2 | 12.59 | −25.5 | 3739 | 2 | 14.16 | −26.9 |
| 883 | 3 | 14.29 | −25.0 | 1798 | 2 | 13.81 | −26.7 | 3740 | 2 | 14.44 | −26.0 |
| 928 | 2 | 13.93 | −28.1 | 1799 | 2 | 13.03 | −27.1 | 3748 | 2 | 13.79 | −27.8 |
| 929 | 2 | 14.63 | −26.9 | 1847 | 2 | 12.62 | −28.5 | | | | |

TABLE II—*Continued*

Zone 30° to 35° { Mean Latitude = +32°.08 / Mean Diurnal Motion = 13°.63

| Number | Days | Diurnal Motion Sidereal | Heliographic Latitude | Number | Days | Diurnal Motion Sidereal | Heliographic Latitude | Number | Days | Diurnal Motion Sidereal | Heliographic Latitude |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 76..... | 2 | 13°.24 | 32°.4 | 1117..... | 2 | 14°.47 | 30°.5 | 1625..... | 3 | 13°.46 | 34°.2 |
| 94..... | 4 | 13.80 | 30.3 | 1118..... | 2 | 14.77 | 33.9 | 1688..... | 3 | 14.09 | 30.2 |
| 95..... | 4 | 14.16 | 32.3 | 1127..... | 3 | 13.26 | 33.5 | 1689..... | 2 | 13.72 | 30.7 |
| 102..... | 3 | 14.48 | 31.7 | 1139..... | 2 | 13.27 | 32.0 | 1724..... | 2 | 13.95 | 32.1 |
| 105..... | 3 | 14.53 | 30.8 | 1194..... | 3 | 13.21 | 30.7 | 1725..... | 2 | 13.95 | 34.9 |
| 106..... | 3 | 14.16 | 34.6 | 1195..... | 3 | 13.58 | 31.8 | 1825..... | 2 | 13.43 | 32.0 |
| 257..... | 3 | 12.83 | 30.5 | 1307..... | 3 | 13.84 | 32.8 | 1948..... | 2 | 13.51 | 30.7 |
| 259..... | 2 | 13.66 | 34.1 | 1309..... | 3 | 14.09 | 34.2 | 1999..... | 3 | 13.37 | 31.0 |
| 617..... | 2 | 14.57 | 33.5 | 1310..... | 2 | 13.97 | 33.1 | 2002..... | 2 | 13.96 | 33.3 |
| 657..... | 2 | 13.94 | 30.1 | 1312..... | 4 | 13.32 | 30.6 | 2016'..... | 6 | 13.19 | 32.0 |
| 748..... | 2 | 12.38 | 30.0 | 1313..... | 4 | 13.05 | 32.7 | 2040..... | 4 | 14.10 | 32.4 |
| 781..... | 2 | 13.73 | 30.0 | 1317..... | 4 | 13.17 | 31.8 | 2047..... | 2 | 13.33 | 32.1 |
| 791..... | 2 | 12.32 | 33.3 | 1339..... | 2 | 11.98 | 32.5 | 2048..... | 2 | 14.07 | 31.2 |
| 972..... | 3 | 13.62 | 30.5 | 1553..... | 3 | 12.80 | 30.5 | 2175..... | 2 | 13.47 | 30.0 |
| 977..... | 2 | 13.45 | 31.8 | 1554..... | 2 | 13.56 | 33.8 | 2234..... | 2 | 13.99 | 34.9 |
| 1021..... | 3 | 13.87 | 30.3 | 1613..... | 5 | 13.43 | 33.9 | 2301..... | 2 | 13.84 | 31.2 |
| 1022..... | 3 | 13.47 | 32.5 | 1614..... | 3 | 13.10 | 30.9 | 2592..... | 2 | 14.52 | 33.4 |
| 1083..... | 2 | 13.16 | 35.2 | 1620..... | 3 | 13.59 | 31.7 | 3209..... | 2 | 13.18 | 32.0 |
| 1116..... | 2 | 14.36 | 32.0 | 1621..... | 3 | 13.94 | 31.4 | | | | |

Zone −30° to −35° { Mean Latitude = −31°.98 / Mean Diurnal Motion = 13°.88

| Number | Days | Diurnal Motion Sidereal | Heliographic Latitude | Number | Days | Diurnal Motion Sidereal | Heliographic Latitude | Number | Days | Diurnal Motion Sidereal | Heliographic Latitude |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 113..... | 2 | 14°.77 | −31°.2 | 1183..... | 2 | 14°.31 | −32°.3 | 1846..... | 2 | 14°.34 | −34°.2 |
| 117..... | 2 | 13.31 | −33.5 | 1275..... | 2 | 14.25 | −30.0 | 1848..... | 2 | 14.34 | −32.0 |
| 128..... | 3 | 13.26 | −30.0 | 1277..... | 2 | 14.25 | −33.8 | 1935..... | 2 | 13.21 | −32.0 |
| 129..... | 2 | 13.96 | −31.5 | 1278..... | 2 | 14.05 | −33.0 | 1936..... | 2 | 12.61 | −33.2 |
| 183..... | 2 | 13.41 | −31.5 | 1304..... | 2 | 13.97 | −33.0 | 2184..... | 2 | 13.67 | −30.9 |
| 184..... | 2 | 14.13 | −30.6 | 1308..... | 3 | 13.74 | −30.8 | 2320..... | 3 | 14.29 | −30.3 |
| 220..... | 2 | 14.94 | −32.3 | 1352..... | 2 | 13.45 | −33.8 | 2342..... | 2 | 13.76 | −34.2 |
| 221..... | 2 | 13.59 | −30.8 | 1333..... | 2 | 13.35 | −31.0 | 2354..... | 2 | 13.47 | −31.0 |
| 405..... | 2 | 13.22 | −32.6 | 1571..... | 2 | 13.76 | −34.5 | 2355..... | 2 | 14.58 | −33.4 |
| 549..... | 2 | 13.69 | −30.5 | 1580..... | 5 | 13.38 | −33.3 | 2434..... | 2 | 13.86 | −30.8 |
| 550..... | 2 | 13.69 | −30.1 | 1581..... | 3 | 13.73 | −31.3 | 2435..... | 2 | 14.16 | −33.2 |
| 587..... | 3 | 14.38 | −30.0 | 1595..... | 2 | 14.01 | −30.8 | 2438..... | 2 | 13.27 | −34.4 |
| 592..... | 4 | 13.16 | −30.4 | 1657..... | 2 | 14.23 | −30.0 | 2618..... | 2 | 14.55 | −33.7 |
| 616..... | 2 | 13.40 | −32.7 | 1708..... | 2 | 13.72 | −31.2 | 2623..... | 2 | 14.71 | −31.8 |
| 937..... | 2 | 12.83 | −31.2 | 1711..... | 3 | 13.94 | −31.4 | 2624..... | 2 | 14.71 | −34.6 |
| 938..... | 2 | 14.03 | −30.5 | 1712..... | 3 | 13.28 | −32.7 | 2649..... | 3 | 13.48 | −32.2 |
| 1182..... | 2 | 14.42 | −32.0 | 1844..... | 2 | 14.04 | −34.5 | 3339..... | 2 | 15.28 | −30.1 |

Zone 35° to 40° { Mean Latitude = +37°.12 / Mean Diurnal Motion = 13°.26

| Number | Days | Diurnal Motion Sidereal | Heliographic Latitude | Number | Days | Diurnal Motion Sidereal | Heliographic Latitude | Number | Days | Diurnal Motion Sidereal | Heliographic Latitude |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 121..... | 2 | 13°.18 | 36°.9 | 783..... | 2 | 13°.93 | 38°.5 | 1827..... | 2 | 13°.73 | 38°.4 |
| 122..... | 2 | 13.71 | 35.4 | 840..... | 2 | 13.54 | 35.2 | 2049..... | 2 | 13.96 | 35.5 |
| 125..... | 2 | 15.17 | 38.5 | 978..... | 2 | 12.45 | 37.1 | 2050..... | 2 | 11.87 | 35.1 |
| 258..... | 2 | 9.89 | 38.8 | 1119..... | 2 | 14.05 | 37.1 | 2051..... | 2 | 14.07 | 37.5 |
| 475..... | 3 | 13.55 | 36.0 | 1128..... | 3 | 12.62 | 36.4 | 2235..... | 2 | 14.09 | 38.6 |
| 480..... | 2 | 12.74 | 38.8 | 1140..... | 2 | 12.37 | 35.9 | 2593..... | 2 | 14.21 | 38.0 |
| 519..... | 2 | 13.57 | 36.9 | 1331..... | 2 | 12.19 | 35.9 | | | | |
| 782..... | 2 | 13.53 | 37.7 | 1338..... | 2 | 13.30 | 38.5 | | | | |

TABLE II—*Continued*

Zone −35° to −40° { Mean Latitude = −37°.59; Mean Diurnal Motion = 13°.65

| Number | Days | Diurnal Motion Sidereal | Heliographic Latitude | Number | Days | Diurnal Motion Sidereal | Heliographic Latitude | Number | Days | Diurnal Motion Sidereal | Heliographic Latitude |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 179..... | 2 | 13°.71 | −38°.1 | 1425..... | 3 | 13°.12 | −39°.9 | 2356..... | 2 | 13°.78 | −35°.6 |
| 180..... | 2 | 14.23 | −39.7 | 1710..... | 3 | 13.88 | −35.1 | 2437..... | 2 | 14.56 | −36.1 |
| 546..... | 2 | 14.12 | −35.4 | 1845..... | 2 | 13.13 | −37.5 | 2439..... | 2 | 13.27 | −35.3 |
| 593..... | 2 | 14.36 | −36.9 | 2309..... | 6 | 13.63 | −37.6 | 2440..... | 2 | 13.67 | −39.6 |
| 596..... | 3 | 12.77 | −39.8 | 2327..... | 3 | 13.63 | −37.2 | 2625..... | 2 | 14.71 | −38.9 |
| 1353..... | 2 | 12.05 | −38.2 | 2350..... | 2 | 13.47 | −38.2 | | | | |

Zone 40° to 45° { Mean Latitude = +41°.61; Mean Diurnal Motion = 12°.46

| Number | Days | Diurnal Motion Sidereal | Heliographic Latitude | Number | Days | Diurnal Motion Sidereal | Heliographic Latitude | Number | Days | Diurnal Motion Sidereal | Heliographic Latitude |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 260..... | 2 | 12°.10 | 43°.4 | 1141..... | 2 | 11°.47 | 40°.1 | 2053..... | 2 | 13°.75 | 43°.3 |
| 481..... | 2 | 11.33 | 40.1 | 1314..... | 2 | 12.88 | 40.2 | 2054..... | 2 | 12.18 | 40.3 |
| 980..... | 2 | 12.85 | 40.6 | 2052..... | 2 | 13.12 | 44.9 | | | | |

Zone −40° to −45° { Mean Latitude = −41°.25; Mean Diurnal Motion = 12°.80

| Number | Days | Diurnal Motion Sidereal | Heliographic Latitude | Number | Days | Diurnal Motion Sidereal | Heliographic Latitude |
|---|---|---|---|---|---|---|---|
| 1709..... | 3 | 12°.01 | −41°.5 | 2441..... | 4 | 13°.59 | −40°.8 |

Zone 45° to 50° { Mean Latitude = +47°.73; Mean Diurnal Motion = 11°.58

| Number | Days | Diurnal Motion Sidereal | Heliographic Latitude | Number | Days | Diurnal Motion Sidereal | Heliographic Latitude | Number | Days | Diurnal Motion Sidereal | Heliographic Latitude |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 979..... | 2 | 11°.14 | 50°.0 | 1315..... | 2 | 11°.70 | 47°.5 | 1316..... | 2 | 11°.89 | 45°.7 |

Zone −45° to −50° { Mean Latitude = −45°.5; Mean Diurnal Motion = 9°.78

| Number | Days | Diurnal Motion Sidereal | Heliographic Latitude |
|---|---|---|---|
| 755..... | 2 | 9°.78 | −45°.5 |

TABLE II—*Continued*

Zone 50° to 55° { Mean Latitude = +51°.95 / Mean Diurnal Motion = 11°.76

| Number | Days | Diurnal Motion Sidereal | Heliographic Latitude | Number | Days | Diurnal Motion Sidereal | Heliographic Latitude |
|---|---|---|---|---|---|---|---|
| 261..... | 2 | 12°.38 | 53°.9 | 979..... | 2 | 11°.14 | 50°.0 |

Zone −50° to −55° { Mean Latitude = −50°.8 / Mean Diurnal Motion = 7°.87

| Number | Days | Diurnal Motion Sidereal | Heliographic Latitude |
|---|---|---|---|
| 754..... | 2 | 7°.87 | −50°.8 |

## COLLECTED RESULTS AND THEIR REPRESENTATION BY FORMULAE

Various formulae have been used to represent the angular motion in different heliographic latitudes. Taking the values of the mean diurnal sidereal motions ($\xi$), for the different five-degree zones with the mean latitudes ($\phi$), corresponding to these means, constants have been computed for the following formulae:

$$\xi = a + b \cos^2 \phi \quad \text{and} \quad \xi = c + d \cos \phi$$

with results as follows:

$$\xi = 11°.584 + 2°.976 \cos^2 \phi \quad \text{and} \quad \xi = 9°.174 + 5°.372 \cos \phi$$

In determining the mean latitudes and mean diurnal sidereal motions for substitution in the formulae for the derivation of the constants, the values for the two hemispheres have been combined, weighting them according to the number of points measured. Either formula represents the observations well within the error of measurement, as is shown in the following table.

TABLE III

REPRESENTATION OF THE OBSERVATIONS BY EMPIRICAL FORMULAE

| Number of Points | $\phi$ | Observed $\xi$ | $\xi = a + b \cos^2 \phi$ | | $\xi = c + d \cos \phi$ | |
|---|---|---|---|---|---|---|
| | | | Computed $\xi$ | $\Delta\xi$ | Computed $\xi$ | $\Delta\xi$ |
| 267..... | 2°.78 | 14°.56 | 14°.553 | +0°.01 | 14°.540 | +0°.02 |
| 540..... | 7.80 | 14.51 | 14.505 | 0.00 | 14.496 | +0.01 |
| 842..... | 12.56 | 14.38 | 14.419 | −0.04 | 14.417 | −0.04 |
| 1044..... | 17.49 | 14.30 | 14.291 | +0.01 | 14.298 | 0.00 |
| 664..... | 22.20 | 14.12 | 14.135 | −0.02 | 14.148 | −0.03 |
| 274..... | 27.17 | 13.98 | 13.939 | +0.04 | 13.953 | +0.03 |
| 107..... | 32.03 | 13.75 | 13.723 | +0.03 | 13.728 | +0.02 |
| 39..... | 37.32 | 13.43 | 13.466 | −0.04 | 13.446 | −0.02 |

Examination of the observations, however, shows that for every pair of zones except the first, 0° to 5°, the southern hemisphere has slightly higher angular motion. Therefore, using the $\cos^2 \phi$ formula, the constants were computed independently for the two hemispheres, as follows:

$$\text{Northern hemisphere, } \xi = 11^\circ.107 + 3^\circ.449 \cos^2 \phi$$

$$\text{Southern hemisphere, } \xi = 12^\circ.143 + 2^\circ.408 \cos^2 \phi$$

The representation of the observations by these formulae is given in Table IV.

TABLE IV

DISTRIBUTION OF THE OBSERVATIONS IN HEMISPHERES AND THEIR REPRESENTATION BY FORMULAE

| Northern Hemisphere | | | | | Southern Hemisphere | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Number of Points | $\phi$ | Observed $\xi$ | Computed $\xi$ | $\Delta\xi$ | Number of Points | $\phi$ | Observed $\xi$ | Computed $\xi$ | $\Delta\xi$ |
| 156..... | 2°.88 | 14°.58 | 14°.547 | +0°.03 | 111..... | − 2°.65 | 14°.53 | 14°.546 | −0°.02 |
| 323..... | 7.86 | 14.51 | 14.492 | +0.02 | 217..... | − 7.71 | 14.52 | 14.508 | +0.01 |
| 499..... | 12.49 | 14.33 | 14.395 | −0.07 | 343..... | −12.67 | 14.43 | 14.435 | +0.01 |
| 521..... | 17.39 | 14.24 | 14.253 | −0.01 | 523..... | −17.58 | 14.35 | 14.331 | +0.02 |
| 311..... | 22.22 | 14.05 | 14.063 | −0.01 | 353..... | −22.19 | 14.19 | 14.208 | −0.02 |
| 116..... | 27.01 | 13.88 | 13.845 | +0.03 | 158..... | −27.28 | 14.05 | 14.045 | 0.00 |
| 56..... | 32.08 | 13.63 | 13.583 | +0.05 | 51..... | −31.98 | 13.88 | 13.876 | 0.00 |
| 22..... | 37.12 | 13.26 | 13.300 | −0.04 | 17..... | −37.58 | 13.65 | 13.655 | −0.01 |

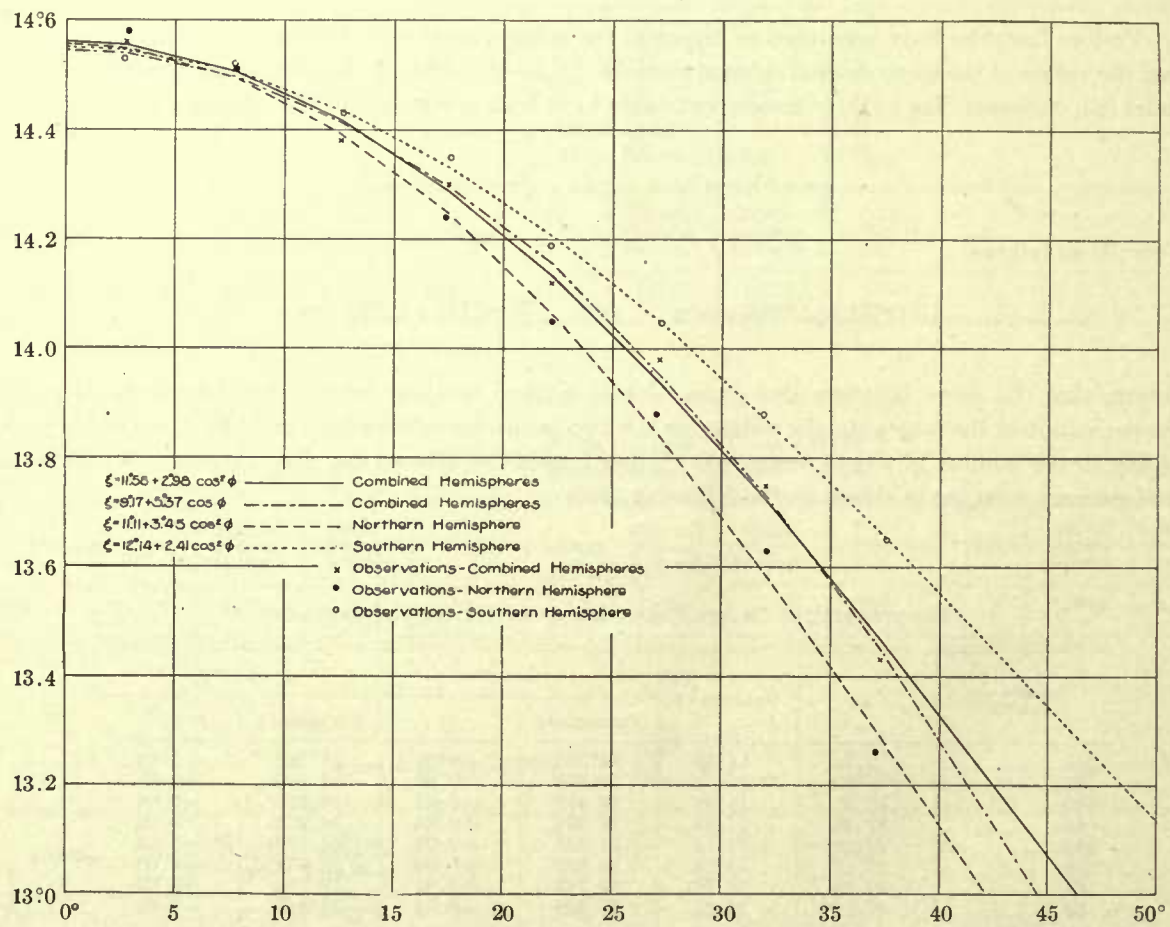



FIG. 5.—Representation of the observations by empirical formulae. The abscissae are heliographic latitudes, the ordinates are diurnal motions.

The results of these computations for the combined and separate hemispheres are shown graphically in Figure 5. The asymmetry, with the zones of the southern hemisphere showing higher speeds than the respective zones of the northern hemisphere, while but slight, seems very consistent. It confirms, at least for the period 1903 to 1908, the first announcements of the 1911 observations by Hubrecht at the Cambridge Observatory.[7] The later discussion by Hubrecht of a more extensive series of plates, however, indicates that in June, 1911, the northern hemisphere had the higher angular speed.[8] Observations by De Lury and O'Connor[9] for certain dates in 1918 and 1919, in agreement with the present results, indicate higher velocities in the southern hemisphere. This is also indicated in observations on the faculae by Chevalier[10] in the years 1905–8.

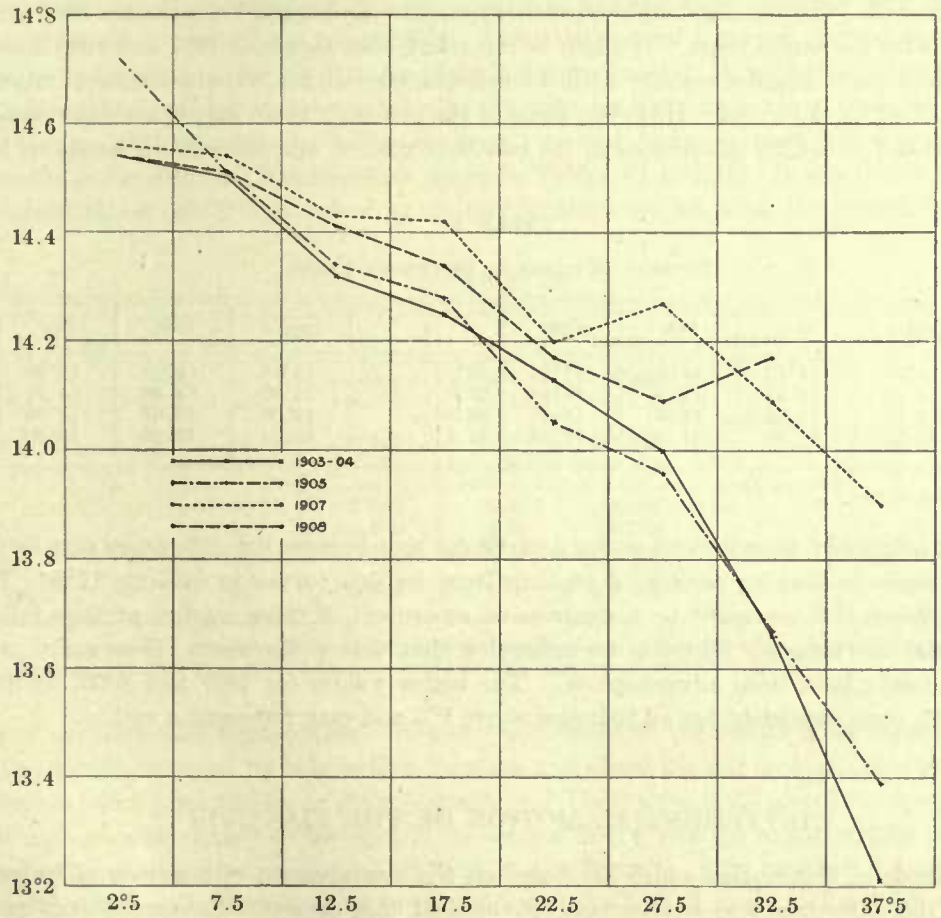



FIG. 6.—Comparison of observations of different years. The abscissae are heliographic latitudes, the ordinates are diurnal motions.

If curves should be drawn connecting the actual platted observations for each hemisphere separately and for the combined hemispheres, it would be seen that they would be sinusoidal about the mean curves derived from the formulae. While the deviations from the mean curve are small, the maxima and minima of these sinusoids fall in the same latitudes in the two hemispheres. This may present evidence bearing on the discontinuity surfaces called for by Emden's solar theory.[11] If the observations had been grouped in narrower zones the test of this would have been sharper.

[7] *Transactions of the International Union for Co-operation in Solar Research*, Vol. IV (1914), p. 120, and *M.N.*, Vol. LXXIII (1912), p. 24.

[8] *Annals of the Solar Physics Observatory*, Cambridge, Vol. III (1915), Part I, p. 60.

[9] *Publications American Astronomical Society*, Vol. III (1918), p. 88.

[10] *Annales de l'Observatoire Astronomique de Zó-sè, V* (1911), 85.

[11] R. Emden, *Gaskugeln*; Hubrecht, *Annals of the Solar Physics Observatory*, Cambridge, Vol. III (1915), Part I, p. 69.

## CHANGE OF ROTATION PERIOD

Various investigators have discussed their observations with a view of detecting change in the rate of solar rotation. With a purpose to ascertain if the present series of observations shows such a change from year to year, the observations have been grouped into four periods: 1903–4, 1905, 1907, 1908, and separate means for the different zones have been derived. Means were also made for corresponding latitudes of the points and as these mean latitudes for given zones are not identical in the four groups, the angular velocities have been reduced to the center of the zone by applying a differential correction obtained from the general curve of the combined hemispheres. The comparison of these values is given in Table V and are platted in Figure 6. Certain slight differences are apparent: the angular velocities for 1907 and 1908 are higher than those for the earlier years. It might be remarked, also, that both 1907 and 1908 show between 20° and 30° an increase of angular velocity with the heliographic latitude, a characteristic in rotation curves which has been cited by Hubrecht. However, some of the points in these curves are determined by very few observations and unequally distributed in the two hemispheres, and therefore it would be injudicious

TABLE V

DIURNAL MOTIONS IN DIFFERENT YEARS

| $\phi$ | 1903–4 | 1905 | 1907 | 1908 | $\phi$ | 1903–4 | 1905 | 1907 | 1908 |
|---|---|---|---|---|---|---|---|---|---|
| 2°.5 | 14°.54 | 14°.72 | 14°.56 | 14°.54 | 22°.5 | 14°.13 | 14°.05 | 14°.20 | 14°.17 |
| 7.5 | 14.50 | 14.51 | 14.54 | 14.51 | 27.5 | 14.00 | 13.80 | 14.27 | 14.09 |
| 12.5 | 14.32 | 14.34 | 14.43 | 14.41 | 32.5 | 13.66 | 13.67 | 14.09 | 14.17 |
| 17.5 | 14.25 | 14.28 | 14.42 | 14.34 | 37.5 | 13.21 | 13.39 | 13.90 | ..... |

to put too great reliance on their indications for a particular zone because the differences may be fortuitous. All four curves agree in showing positive deviations from smooth curves in latitude 17°.5. The curves were examined to see if there might be a progressive movement of these humps, perhaps following the zone of maximum spottedness. There is no indication that this is the case. Here again grouping in narrower zones might have been advantageous. The higher values for 1907 and 1908, compared with 1903–4 and 1905, seem consistent for all latitudes above 7°.5 and may represent a reality.

## DIFFERENTIAL MOTION OF THE FLOCCULI

The methods of observation which are based on the measurement of positions of features on the solar disk have this advantage over the spectroscopic method, that they afford a possibility of grouping the features according to character and, in the case of faculae and flocculi, according to their location relative to the spots for the determination of the rotation periods in various classifications.

In this series of observations such groupings have been made with the view of detecting any systematic motions about the spots. First the test was made in two zones having large numbers of measured points: zones $+10°$ to $+15°$ and $-15°$ to $-20°$. The points were grouped under the following classifications: (1) isolated flocculi; (2) flocculus groups; (3) according to the following position about uni-polar spots—preceding (*p*), poleward-preceding (*Pp*), poleward (*P*), poleward-following (*Pf*), following (*f*), equatorward-following (*Ef*), equatorward (*E*), equatorward-preceding (*Ep*); (4) according to these same positions about the members of bi-polar spots, adding three classes, namely, between (*b*), between-poleward (*bP*), and between-equatorward (*bE*), for those points midway between the members. The distance (*d*) of each flocculus from the spot with which it is associated, estimated in heliographic degrees, was also noted.

By taking single zones there were too few points available in the many classifications for the derivation of trustworthy means. Each zone, however, showed that the flocculi unassociated with spots gave the same diurnal angular motion as the mean of all points and it is therefore warrantable to say that, while there may be systematic motions about the sun-spots, the spots do not drag their associated flocculi with speeds accelerated or retarded from the mean for all the measured points of the zone.

When it had been established that the velocity of the flocculi about spot groups in the average did not differ from the general average, it was justifiable to treat them separately. Neglecting then those flocculi not associated with spots, all others were grouped, irrespective of heliographic latitude, into the classifications about single and bi-polar spots, used above for the single zones. Naturally it was not permissible to use the diurnal motions directly because points of widely different latitude were grouped together and the means would not have been comparable. From the general curves of diurnal motions, Figure 5, the average diurnal motion ($\xi$) for any latitude could be taken directly. The diurnal motion of each flocculus entering into this discussion was compared with the value for its latitude taken from the curves and the differential motions ($\Delta\xi$) thus found, whether in excess (+) or defect (−), were recorded and combined to form the means in the different classifications, given in Tables VI to XII. It was found that more symmetrical representation could be obtained in the two hemispheres by using the general values of $\xi$ from

TABLE VI*

| Class | Number | $\Delta\xi$ | $d$ | $d\Delta\xi \sin a$ | $[d\Delta\xi \sin a]$ | Direction of Whirl |
|---|---|---|---|---|---|---|
| *p* | 50 | +0°.041 | 3°.8 | 0°.000 | | |
| *Pp* | 23 | +0.155 | 3.4 | +0.372 | +0°.642 | |
| *P* | 34 | +0.056 | 3.0 | +0.168 | | |
| *Pf* | 53 | +0.030 | 4.8 | +0.102 | | +1°.094 anti-cyclonic |
| *f* | 71 | −0.067 | 5.0 | 0.000 | | |
| *Ef* | 49 | −0.085 | 4.8 | −0.288 | −0.452 | |
| *E* | 31 | −0.064 | 3.5 | −0.224 | | |
| *Ep* | 24 | +0.020 | 4.2 | +0.060 | | |

* Summary of differential motions of the flocculi associated with single spots. Both hemispheres are combined but each $\xi$ is referred to the $\xi$-curve of its own hemisphere to obtain its $\Delta\xi$.

the curves of the respective hemispheres. In every case therefore the values of $\Delta\xi$ entering in the tables just mentioned were obtained by subtracting from the individual diurnal motion the value for its heliographic latitude taken from the curve of its hemisphere. The values of $\Delta\xi$ about the spots, then, are not differential motions with respect to the spot in the sense of being referred to the motion of the spots, but are motions relative to means of diurnal motions of the flocculi. This practice of treating the flocculi about spots separately and referring them to the motion of the flocculi in general is further justified when it is found that for the 653 points considered the average $\Delta\xi$ has the small value −0°.015.

The data are divided into two general groups, that for flocculi about single, uni-polar, spots and that for flocculi about bi-polar spots. Only the summaries are given in the tables. It is not thought necessary to give the individual results. The tables have quite similar form. In each is given the number of points in each classification (and in some cases they are too few to give reliable means considering the rather erratic individual results), the mean differential motion ($\Delta\xi$), and mean distance ($d$).

In Table VI is presented the summary for the combined hemispheres of the values of $\Delta\xi$ for all flocculi associated with single spots. The values of $\Delta\xi$ from this table with corresponding $d$ are platted in Figure 7. A general rotary motion is indicated and its direction is opposite in sense to the rotation of the Sun on its axis and is therefore termed anti-cyclonic. If this is a true whirl the velocity for any classification would vary directly as the distance from the center of the vortex. It is sought to bring these results into form more directly comparable by deriving from the differential motions in heliographic longitude

the components tangential to the vortex and reduced to unit distance. These moments are given in the columns headed $d\Delta\xi \sin a$. The angle $a$ is the angle measured from the parallel of latitude. It is of course recognized that for completeness the differential motions in heliographic latitude should have been derived and included in the discussion. $\Delta\xi \sin a$ is the projection of but one component of the differential motion. If the sum of the values of $d\Delta\xi \sin a$ on the equatorial side be subtracted from that on the poleward side the difference will be an indication of the degree of the whirl, the moment of the aggregated pair, and its sign will indicate the direction, according to conventions here used, cyclonic if negative and anti-cyclonic if positive. The figures in Table VI indicate *anti-cyclonic* motion unmistakably.

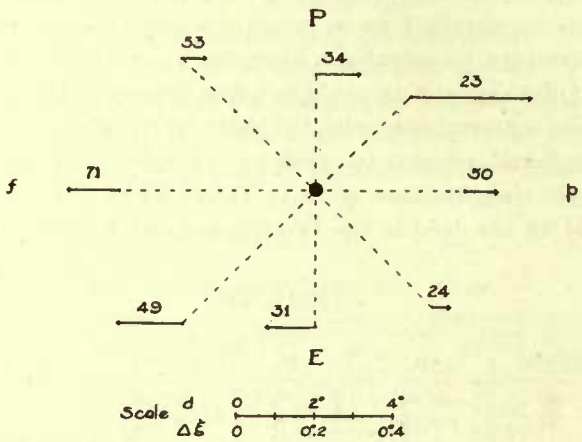



FIG. 7.—Differential motions in heliographic longitude about single spots. The mean distances of the points from the spots and amount of the motions are graphically represented. The numbers indicate the number of points from which the motions were derived.

TABLE VII*

| CLASS | NORTHERN HEMISPHERE | | | | | | SOUTHERN HEMISPHERE | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | No. | $\Delta\xi$ | $d$ | $d\Delta\xi \sin a$ | $[d\Delta\xi \sin a]$ | Direction of Whirl | No. | $\Delta\xi$ | $d$ | $d\Delta\xi \sin a$ | $[d\Delta\xi \sin a]$ | Direction of Whirl |
| *p* | 20 | −0°.097 | 3°.1 | 0°.000 | | | 30 | +0°.134 | 4°.3 | 0°.000 | | |
| *Pp* | 8 | +0.086 | 2.7 | +0.162 | +0°.125 | | 15 | +0.192 | 3.7 | +0.500 | +1°.246 | |
| *P* | 19 | +0.035 | 3.2 | +0.112 | | | 15 | +0.083 | 2.9 | +0.241 | | |
| *Pf* | 32 | −0.045 | 4.7 | −0.149 | | +0°.397 anti-cyclonic | 21 | +0.146 | 4.9 | +0.505 | | +1°.403 anti-cyclonic |
| *f* | 42 | −0.151 | 3.3 | 0.000 | | | 29 | +0.054 | 5.6 | 0.000 | | |
| *Ef* | 38 | −0.104 | 4.9 | −0.360 | −0.522 | | 11 | −0.021 | 4.3 | −0.064 | −0.157 | |
| *E* | 19 | −0.084 | 3.3 | −0.277 | | | 12 | −0.033 | 3.7 | −0.122 | | |
| *Ep* | 9 | +0.037 | 4.4 | +0.115 | | | 15 | +0.010 | 4.1 | +0.029 | | |

* Summary of differential motions of the flocculi about single spots, grouped according to hemisphere.

The question might be raised as to the suitability of combining values for the two hemispheres. The observations were thus combined to furnish more observations and provide more trustworthy means. In Table VII the same observations are grouped according to hemisphere. The justification for the combination in Table VI is apparent, for the individual hemispheres reveal similar anti-cyclonic motions.

Groupings of points similar to those just considered for single spots are given for bi-polar spots in tables VIII and IX. The results for the combination of all observations, Table VIII, and Figure 8, show two things: first, that the flocculi about the two principal members of the bi-polar group are separating, those about the leader are forging ahead and those about the trailer are lagging behind, and second, that the motion about the leader is *cyclonic* and about the trailer, *anti-cyclonic*. When the observations are

separated in hemispheres, Table IX, the first fact is again envisaged and again for the leading spot the cyclonic motion is indicated, but for the southern solar hemisphere the sense of motion about the following spot does not agree with the combined result.

The observations at Mt. Wilson[12] on the magnetic polarity of sun-spots have indicated the existence of magnetic fields in sun-spots and, further, have indicated similar polarity for single spots and for the

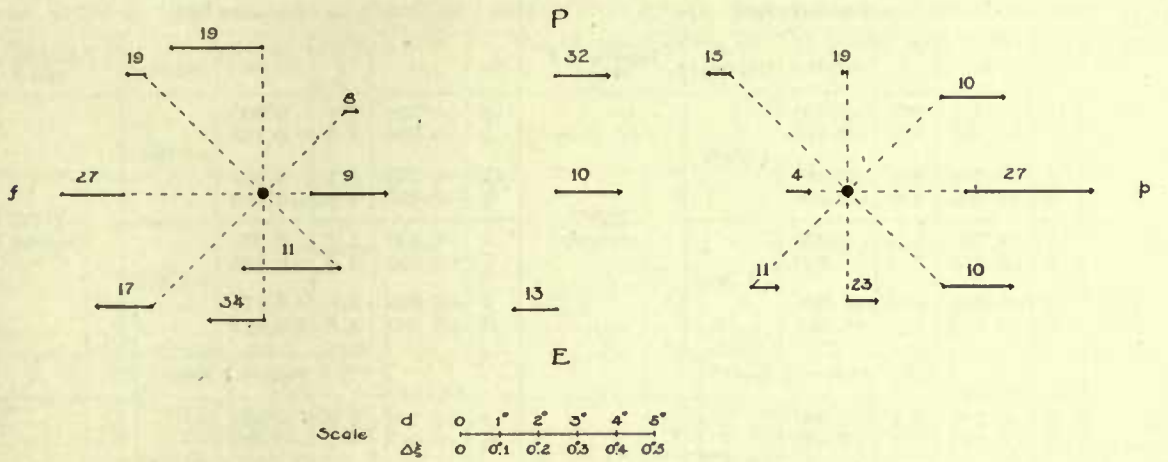



FIG. 8.—Differential motions in longitude about bi-polar spots. The numbers indicate the number of spots from which the mean distances ($d$) and mean motions ($\Delta\xi$) were derived.

TABLE VIII*

| Class | Preceding Spot | | | | | | Following Spot | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | No. | Δξ | d | dΔξ sin a | [dΔξ sin a] | Direction of Whirl | No. | Δξ | d | dΔξ sin a | [dΔξ sin a] | Direction of Whirl |
| *p* | 27 | +0°.332 | 3°.0 | 0°.000 | | | 9 | +0°.191 | 1°.2 | 0°.000 | | |
| *Pp* | 10 | +0.166 | 3.4 | +0.398 | +0°.225 | | 8 | +0.030 | 3.0 | +0.063 | −1°.000 | |
| *P* | 19 | −0.003 | 3.1 | −0.009 | | | 19 | −0.246 | 3.8 | −0.936 | | |
| *Pf* | 15 | −0.054 | 4.3 | −0.164 | | | 19 | −0.041 | 4.4 | −0.127 | | |
| *f* | 4 | +0.050 | 1.5 | 0.000 | | −0°.780 | 27 | −0.164 | 3.6 | 0.000 | | +0°.360 |
| *Ef* | 11 | +0.152 | 3.5 | +0.375 | +1.005 | cyclonic | 17 | −0.142 | 4.1 | −0.411 | −1.360 | anti-cyclonic |
| *E* | 23 | +0.073 | 2.8 | +0.205 | | | 34 | −0.145 | 3.2 | −0.464 | | |
| *Ep* | 10 | +0.174 | 3.5 | +0.430 | | | 11 | −0.255 | 2.7 | −0.485 | | |
| | Between | | | | | | | | | | | |
| *b* | 10 | +0.162 | | | | | | | | | | |
| *bP* | 32 | +0.138 | | | | | | | | | | |
| *bE* | 13 | −0.114 | | | | | | | | | | |

* Summary of differential motions of the flocculi about bi-polar spots. Combined hemispheres.

leading spot of bi-polar groups. If this magnetic field is explained by the supposition of a hydro-dynamical vortex, then the polarities observed would indicate rotation in the same direction for these types of spots if the electric charge carried by the material is of like sign. The indication of anti-cyclonic motion about single spots and cyclonic about the leader of bi-polar groups is then somewhat unexpected unless we had foreseen the likelihood of charges of unlike sign. If we accept the Mt. Wilson polarity observations and if the results of the present discussion showing opposite direction of whirl truly represent the motions in the

[12] *Contributions Mt. Wilson Observatory*, No. 165, 1919; *Astrophysical Journal*, Vol. XLIX (1919), p. 153.

vortices, then we must conclude that the predominant charges carried in the vortices of single spots and leaders of bi-polars are of opposite sign. This may have important bearing on the law of spot

TABLE IX*

| Class | Northern Hemisphere | | | | | | Southern Hemisphere | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Preceding Spot | | | | | | Preceding Spot | | | | | |
| | No. | $\Delta\xi$ | $d$ | $d\Delta\xi \sin a$ | $[d\Delta\xi \sin a]$ | Direction of Whirl | No. | $\Delta\xi$ | $d$ | $d\Delta\xi \sin a$ | $[d\Delta\xi \sin a]$ | Direction of Whirl |
| *p* | 15 | +0°.414 | 2°.9 | 0°.000 | | | 12 | +0°.228 | 3°.1 | 0°.000 | | |
| *Pp* | 7 | +0.255 | 3.4 | +0.610 | | | 3 | −0.043 | 3.3 | −0.100 | | |
| | | | | | +1°.442 | | | | | | −1°.006 | |
| *P* | 8 | +0.268 | 3.1 | +0.818 | | | 11 | −0.199 | 3.1 | −0.617 | | |
| *Pf* | 6 | +0.005 | 4.0 | +0.014 | | | 9 | −0.093 | 4.4 | −0.289 | | |
| | | | | | | −0°.067 cyclonic | | | | | | −1°.297 cyclonic |
| *f* | 1 | +0.260 | 1.0 | 0.000 | | | 3 | −0.020 | 1.7 | 0.000 | | |
| *Ef* | 4 | +0.330 | 2.8 | +0.650 | | | 7 | +0.050 | 4.0 | +0.142 | | |
| | | | | | +1.509 | | | | | | +0.291 | |
| *E* | 14 | +0.091 | 2.9 | +0.264 | | | 9 | +0.045 | 2.8 | +0.126 | | |
| *Ep* | 7 | +0.234 | 3.6 | +0.595 | | | 3 | +0.010 | 3.3 | +0.023 | | |
| | Following Spot | | | | | | Following Spot | | | | | |
| *p* | 5 | +0.216 | 1.4 | 0.000 | | | 4 | +0.160 | 1.0 | 0.000 | | |
| *Pp* | 2 | +0.245 | 2.5 | +0.432 | | | 6 | −0.042 | 3.2 | −0.095 | | |
| | | | | | +0.470 | | | | | | −1.531 | |
| *P* | 6 | +0.025 | 4.8 | +0.120 | | | 13 | −0.371 | 3.4 | −1.260 | | |
| *Pf* | 10 | −0.026 | 4.5 | −0.082 | | | 9 | −0.058 | 4.3 | −0.176 | | |
| | | | | | | +2.033 anti-cyclonic | | | | | | −0.703 cyclonic |
| *f* | 12 | −0.221 | 4.2 | 0.000 | | | 15 | −0.114 | 3.2 | 0.000 | | |
| *Ef* | 6 | −0.225 | 4.8 | −0.760 | | | 11 | −0.097 | 3.7 | −0.253 | | |
| | | | | | −1.563 | | | | | | −0.728 | |
| *E* | 19 | −0.035 | 3.2 | −0.112 | | | 15 | −0.285 | 3.3 | −0.940 | | |
| *Ep* | 9 | −0.362 | 2.7 | −0.691 | | | 2 | +0.220 | 3.0 | +0.465 | | |
| | Between | | | | | | Between | | | | | |
| *b* | 5 | +0.320 | | | | | 5 | +0.004 | | | | |
| *bp* | 14 | +0.078 | | | | | 18 | +0.184 | | | | |
| *bE* | 6 | +0.073 | | | | | 7 | −0.274 | | | | |

* Summary of differential motions of the flocculi about bi-polar spots grouped according to hemisphere.

TABLE X*

| Class | Heliographic Latitude > 12° | | | | | | Heliographic Latitude < 12° | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | No. | $\Delta\xi$ | $d$ | $d\Delta\xi \sin a$ | $[d\Delta\xi \sin a]$ | Direction of Whirl | No. | $\Delta\xi$ | $d$ | $d\Delta\xi \sin a$ | $[d\Delta\xi \sin a]$ | Direction of Whirl |
| *p* | 36 | +0°.061 | 3°.5 | 0°.000 | | | 14 | −0°.009 | 4°.4 | 0°.000 | | |
| *Pp* | 11 | +0.315 | 3.0 | +0.666 | | | 12 | +0.007 | 3.7 | +0.018 | | |
| | | | | | +0°.914 | | | | | | +0°.389 | |
| *P* | 24 | −0.021 | 3.1 | −0.065 | | | 10 | +0.242 | 2.9 | +0.700 | | |
| *Pf* | 35 | +0.094 | 4.7 | +0.313 | | | 18 | −0.095 | 4.9 | −0.329 | | |
| | | | | | | +0°.747 anti-cyclonic | | | | | | +2°.612 anti-cyclonic |
| *f* | 43 | −0.032 | 5.1 | 0.000 | | | 28 | −0.120 | 5.0 | 0.000 | | |
| *Ef* | 28 | −0.041 | 4.6 | −0.133 | | | 21 | −0.145 | 4.9 | −0.500 | | |
| | | | | | +0.167 | | | | | | −2.223 | |
| *E* | 21 | +0.016 | 3.4 | +0.054 | | | 10 | −0.232 | 3.6 | −0.835 | | |
| *Ep* | 20 | +0.083 | 4.2 | +0.246 | | | 4 | −0.298 | 4.2 | −0.888 | | |

* Summary of differential motions of the flocculi about single spots grouped according to latitude of the associated spots.

development. It must, however, be borne in mind that so far as the present observations are concerned we are dealing with average motions and, moreover, that we are dealing in motions at an average distance from the center of the spots of about 3° while the spectroscopic observations are closer to the umbrae.

In the paper just cited it was also noted that during the progress of the sun-spot cycle the magnetic polarity of the spots reversed sign. The authors concluded that this change was probably not dependent on the latitude of the spots as earlier had been suggested[13] but dependent on the stage of the cycle. To test this, the points were again regrouped, putting those flocculi about spots with heliographic latitude greater than 12° in one group and those about spots closer to the equator in another. The dividing line of latitude 12° was chosen arbitrarily but gave roughly equal numbers of points on either side. For single spots, Table X, the anti-cyclonic character holds in both groups though it is much more pronounced in low latitudes. For the bi-polar spots, Table XI, the cyclonic sense for the leader and anti-cyclonic for the

TABLE XI*

| Class | Heliographic Latitude > 12° | | | | | | Heliographic Latitude < 12° | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Preceding Spot | | | | | | Preceding Spot | | | | | |
| | No. | $\Delta\xi$ | $d$ | $d\Delta\xi \sin a$ | $[d\Delta\xi \sin a]$ | Direction of Whirl | No. | $\Delta\xi$ | $d$ | $d\Delta\xi \sin a$ | $[d\Delta\xi \sin a]$ | Direction of Whirl |
| *p* | 16 | +0°372 | 2°8 | 0°000 | | | 11 | +0°275 | 3°3 | 0°000 | | |
| *Pp* | 6 | +0.101 | 3.2 | +0.228 | | | 4 | +0.262 | 3.8 | +0.640 | | |
| | | | | | −0°103 | | | | | | +0°804 | |
| *P* | 12 | −0.105 | 3.1 | −0.325 | | | 7 | +0.173 | 3.1 | +0.537 | | |
| *Pf* | 9 | −0.002 | 4.4 | −0.006 | | | 6 | −0.132 | 4.0 | −0.373 | | |
| | | | | | | −0°341 | | | | | | −0°727 |
| *f* | 3 | −0.020 | 1.7 | 0.000 | | cyclonic | 1 | +0.260 | 1.0 | 0.000 | | cyclonic |
| *Ef* | 4 | −0.028 | 4.0 | −0.079 | | | 7 | +0.254 | 3.3 | +0.592 | | |
| | | | | | +0.238 | | | | | | +1.531 | |
| *E* | 11 | +0.049 | 2.5 | +0.122 | | | 12 | +0.095 | 3.1 | +0.295 | | |
| *Ep* | 7 | +0.069 | 4.0 | +0.195 | | | 3 | +0.397 | 2.3 | +0.644 | | |
| | Following Spot | | | | | | Following Spot | | | | | |
| *p* | 5 | +0.350 | 1.2 | 0.000 | | | 4 | −0.007 | 1.2 | 0.000 | | |
| *Pp* | 5 | +0.142 | 2.6 | +0.260 | | | 3 | −0.157 | 3.7 | −0.410 | | |
| | | | | | −0.598 | | | | | | −1.518 | |
| *P* | 13 | −0.295 | 3.2 | −0.943 | | | 6 | −0.140 | 5.3 | −0.741 | | |
| *Pf* | 9 | +0.031 | 3.9 | +0.085 | | | 10 | −0.106 | 4.9 | −0.367 | | |
| | | | | | | +0.424 | | | | | | +0.013 |
| *f* | 19 | −0.123 | 3.3 | 0.000 | | anti-cyclonic | 8 | −0.261 | 4.2 | 0.000 | | anti-cyclonic |
| *Ef* | 6 | −0.033 | 3.5 | −0.081 | | | 11 | −0.202 | 4.4 | −0.626 | | |
| | | | | | −1.022 | | | | | | −1.531 | |
| *E* | 23 | −0.163 | 3.0 | −0.489 | | | 11 | −0.107 | 3.6 | −0.385 | | |
| *Ep* | 6 | −0.278 | 2.3 | −0.452 | | | 5 | −0.230 | 3.2 | −0.520 | | |
| | Between | | | | | | Between | | | | | |
| *b* | 4 | +0.160 | | | | | 6 | +0.163 | | | | |
| *bP* | 19 | +0.272 | | | | | 13 | −0.058 | | | | |
| *bE* | 7 | −0.289 | | | | | 6 | +0.090 | | | | |

* Summary of diurnal motions of the flocculi about bi-polar spots, grouped according to latitude of the associated spots.

trailer is apparent in both groups, and just as the anti-cyclonic character is enhanced in low latitudes for single spots, so for the leader of the bi-polar the cyclonic character is emphasized. The increase in the factor of cyclonic indication, i.e., the moment of the pair, for the leader is accompanied by decrease of indication of anti-cyclonic sense of the following member. It would seem then that there is some connection between spot latitude and the character of motion.

The points about single spots were again regrouped, combining both hemispheres, but dividing them according to time. The observations of 1903–4–5 were in one group, those for 1907–8 in the other. The dividing line fell between flocculi Nos. 2212 and 2213. The results are given in Table XII. The indication

[13] *Contributions Mt. Wilson Observatory*, No. 10; *Astrophysical Journal*, Vol. XXV (1906), p. 61.

is almost identical with that from Table X in which latitude 12° was the dividing line irrespective of time. Anti-cyclonic motion is shown and is more pronounced for the later dates. Inasmuch as the zone of maximum spottedness drifts toward the equator during the progress of the cycle the majority of points for the earlier dates correspond with the majority for the group in latitude greater than 12°, and for the

TABLE XII*

| Class | 1903–04–05 | | | | | | 1907–08 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | No. | $\Delta\xi$ | $d$ | $d\Delta\xi \sin a$ | $[d\Delta\xi \sin a]$ | Direction of Whirl | No. | $\Delta\xi$ | $d$ | $d\Delta\xi \sin a$ | $[d\Delta\xi \sin a]$ | Direction of Whirl |
| $p$ | 23 | +0°.006 | 3°.0 | 0°.000 | | | 27 | +0°.071 | 4°.5 | 0°.000 | | |
| $Pp$ | 5 | +0.402 | 2.8 | +0.798 | +0°.800 | | 18 | +0.087 | 3.6 | +0.221 | +0°.764 | |
| $P$ | 15 | −0.021 | 3.0 | −0.063 | | | 19 | +0.117 | 3.1 | +0.363 | | |
| $Pf$ | 35 | +0.022 | 4.2 | +0.065 | | +0°.944 anti-cyclonic | 18 | +0.044 | 5.8 | +0.180 | | +1°.695 anti-cyclonic |
| $f$ | 24 | −0.205 | 4.1 | 0.000 | | | 47 | +0.003 | 5.5 | 0.000 | | |
| $Ef$ | 31 | −0.132 | 4.8 | −0.447 | −0.144 | | 18 | −0.004 | 4.7 | −0.013 | −0.931 | |
| $E$ | 17 | +0.040 | 3.5 | +0.140 | | | 14 | −0.191 | 3.4 | −0.650 | | |
| $Ep$ | 17 | +0.059 | 3.9 | +0.163 | | | 7 | −0.076 | 5.0 | −0.268 | | |

* Summary of differential motions of the flocculi about single spots, grouped according to date.

later dates to flocculi in the group of latitude less than 12°. In the two methods of separation there would be about the same amount of overlapping. There may be doubt as to the reality of the suggested modification of the rotation about the spots, but, even if real, it is impossible in these observations to discriminate between the rôles which simple distribution in latitude or stage in the sun-spot cycle play in bringing about the change.

## COMPARISON WITH OTHER OBSERVERS

In comparing these observations with those of other observers the results of the combined hemispheres are used. Adams[14] and Kempf[15] have recently made comparisons of different determinations of the solar rotation and included the provisional results of this Rumford spectroheliographic determination. The present results should replace the values which they used. To the comparison made by Adams are added results from observations on sun-spots by Tisserand[16]; on the faculae by Chevalier[17]; on the calcium flocculi by Kempf[15]; and by the spectrographic method by Schlesinger[18]; by the Ottawa observers[19]—J. S. Plaskett, H. H. Plaskett, and DeLury; by Storey and Wilson[20]; by Evershed and Royds[21]; and by Hubrecht.[22] Though Hubrecht maintains[23] that it is impossible to apply Faye's law for a strict representation of the observations because he finds "large and comparatively persistent deviations from such

[14] *Publications of the Carnegie Institution of Washington*, No. 138 (1911), p. 118.
[15] *Publications of the Astrophysical Observatory at Potsdam*, No. 71 (1916), p. 36.
[16] *Comptes Rendus*, Vol. LXXXII (1876), p. 765.
[17] *Annales de l'Observatoire Astronomique de Zô-sè*, V (1911), 85.
[18] *Publications of the Allegheny Observatory*, Vol. III (1914), p. 117.
[19] *Astrophysical Journal*, Vol. XLII (1915), p. 392.
[20] *Monthly Notices of the Royal Astronomical Society*, Vol. LXXI (1911), p. 685.
[21] *Ibid.*, Vol. LXXIII (1913), p. 561.
[22] *Annals of the Solar Physics Observatory*, Cambridge, Vol. III, Part I (1915), p. 75.
[23] *Ibid.*, p. 76.

average laws," constants have been computed for the Faye formula, using the observations given in Table XXVI of his paper. The formulae used in determining the values given in Table XIII are as follows:

| | |
|---|---|
| Dunér | $\xi = 10°.60 + 4°.21 \cos^2 \phi$ |
| Halm | $\xi = 12.03 + 2.50 \cos^2 \phi$ |
| Adams | $\xi = 11.04 + 3.50 \cos^2 \phi$ |
| Schlesinger | $\xi = 10.77 + 3.4 \cos^2 \phi$ |
| Ottawa Observers | $\xi = 10.53 + 3.71 \cos^2 \phi$ |
| Storey and Wilson | $\xi = 11.55 + 3.2 \cos^2 \phi$ |
| Hubrecht | $\xi = 10.19 + 3.02 \cos^2 \phi$ |
| Adams *Hα* | $\xi = 13.6 + 1.4 \cos^2 \phi$ |
| Adams λ 4227 | $\xi = 12.5 + 2.4 \cos^2 \phi$ |
| Carrington | $\xi = 14.42 - 2.75 \sin^{\frac{1}{2}} \phi$ |
| Spoerer | $\xi = 8.55 + 5.80 \cos \phi$ |
| Tisserand | $\xi = 11.52 + 2.80 \cos^2 \phi$ |
| Maunder | $\xi = 12.43 + 2.01 \cos^2 \phi$ |
| Chevalier | $\xi = 12.20 + 2.67 \cos^2 \phi$ |
| Kempf | $\xi = 12.37 + 2.06 \cos^2 \phi$ |
| Fox | $\xi = 11.58 + 2.98 \cos^2 \phi$ |

A comparison of the present determination with the other values from the observations of calcium flocculi shows closer agreement with the first determination so made using the Kenwood spectroheliograms than with the later observations made at Mount Wilson and at Potsdam. The internal agreement of these four series of determinations is considerably closer than that among the spectroscopic observers.

TABLE XIII*

| φ | Spectroscopic Observations | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Dunér | Halm | Adams | Schlesinger | Ottawa Observers | Storey and Wilson | Hubrecht | Evershed and Royds | Mean | Adams $H_\alpha$ | Adams λ 4227 |
| 0° ... | 14°.81 | 14°.53 | 14°.54 | 14°.17 | 14°.24 | 14°.75 | 13°.21 | 13°.77 | 14°.25 | 15°.00 | 14°.90 |
| 5 ... | 14.78 | 14.50 | 14.51 | 14.14 | 14.21 | 14.73 | 13.19 | ..... | 14.29 | 14.99 | 14.88 |
| 10 ... | 14.68 | 14.46 | 14.43 | 14.07 | 14.13 | 14.65 | 13.12 | ..... | 14.22 | 14.96 | 14.83 |
| 15 ... | 14.53 | 14.37 | 14.31 | 13.94 | 13.99 | 14.54 | 13.01 | ..... | 14.10 | 14.91 | 14.74 |
| 20 ... | 14.32 | 14.24 | 14.13 | 13.77 | 13.81 | 14.38 | 12.86 | ..... | 13.93 | 14.84 | 14.62 |
| 25 ... | 14.06 | 14.09 | 13.91 | 13.56 | 13.58 | 14.18 | 12.67 | ..... | 13.72 | 14.75 | 14.47 |
| 30 ... | 13.76 | 13.90 | 13.67 | 13.32 | 13.31 | 13.95 | 12.45 | ..... | 13.48 | 14.65 | 14.30 |
| 35 ... | 13.42 | 13.70 | 13.39 | 13.05 | 13.02 | 13.70 | 12.21 | ..... | 13.21 | 14.54 | 14.11 |
| 40 ... | 13.07 | 13.50 | 13.09 | 12.76 | 12.71 | 13.43 | 11.96 | ..... | 12.93 | 14.42 | 13.91 |
| 45 ... | 12.70 | 13.28 | 12.79 | 12.47 | 12.38 | 13.15 | 11.70 | ..... | 12.64 | 14.30 | 13.70 |

| φ | Sun-Spots | | | | | Faculae | | | Calcium Flocculi | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Carrington | Spoerer | Tisserand † | Maunder | Mean | Stratonoff | Chevalier | Mean | Hale and Fox | Hale | Kempf | Fox | Mean |
| 0° ... | 14°.42 | 14°.35 | 14°.32 | 14°.44 | 14°.38 | 14°.62 | 14°.47 | 14°.54 | 14°.70 | 14°.42 | 14°.43 | 14°.56 | 14°.53 |
| 5 ... | 14.38 | 14.32 | 14.30 | 14.43 | 14.36 | 14.61 | 14.46 | 14.53 | 14.59 | 14.38 | 14.41 | 14.54 | 14.48 |
| 10 ... | 14.29 | 14.26 | 14.24 | 14.38 | 14.29 | 14.46 | 14.41 | 14.43 | 14.44 | 14.32 | 14.37 | 14.47 | 14.40 |
| 15 ... | 14.16 | 14.15 | 14.13 | 14.30 | 14.19 | 14.24 | 14.32 | 14.28 | 14.30 | 14.28 | 14.29 | 14.36 | 14.31 |
| 20 ... | 14.00 | 14.00 | 13.99 | 14.19 | 14.04 | 14.18 | 14.21 | 14.20 | 14.17 | 14.27 | 14.19 | 14.21 | 14.21 |
| 25 ... | 13.81 | 13.80 | 13.82 | 14.06 | 13.87 | 14.14 | 14.07 | 14.11 | 14.02 | 14.17 | 14.06 | 14.03 | 14.07 |
| 30 ... | 13.60 | 13.57 | 13.62 | 13.91 | 13.68 | 13.84 | 13.91 | 13.88 | 13.83 | 13.98 | 13.92 | 13.82 | 13.89 |
| 35 ... | 13.38 | 13.30 | 13.40 | 13.74 | 13.45 | ..... | ..... | ..... | ..... | 14.04 | 13.75 | 13.58 | 13.79 |
| 40 ... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 13.92 | 13.58 | 13.33 | 13.61 |
| 45 ... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 13.40 | 13.07 | 13.23 |

* Comparison of results for solar rotation from various methods of observation.

† The observations by Tisserand were inadvertently omitted from the first draft of Table XIII, from which the figures were taken to prepare Fig. 9. Their inclusion lowered the mean values for the angular motion from sun-spot observations consistently by about 0°.02; a quantity scarcely appreciable in the diagram.

The means from the determinations by the different methods are platted in Figure 9. The curves for the sun-spots, faculae, flocculi, and reversing layer are approximately parallel, but there are well-defined demarcations between them. The flocculi and faculae give velocities which are practically identical and

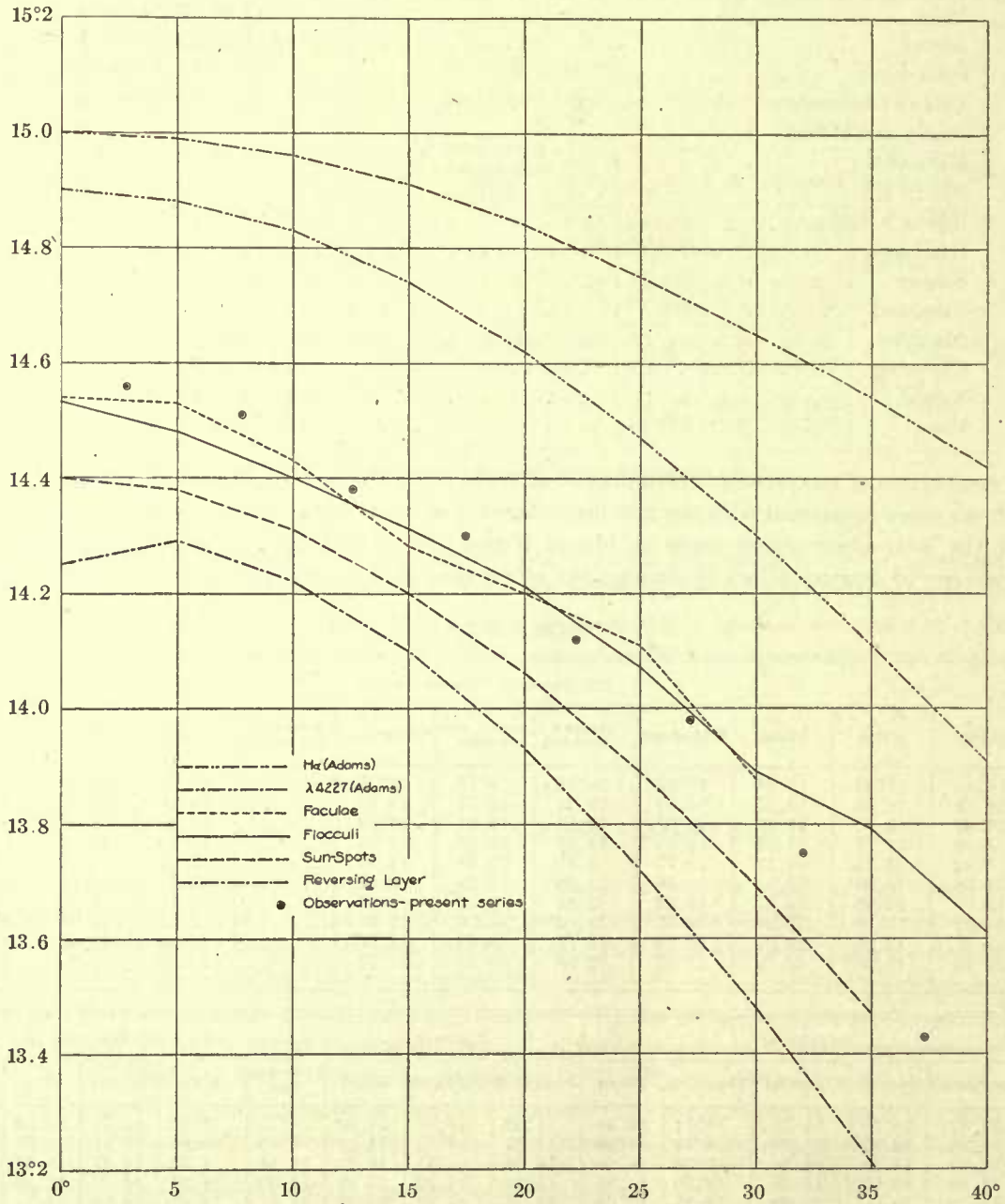



FIG. 9.—Comparison of the means of observations by the various observing methods. The abscissae are heliographic latitudes, the ordinates are sidereal diurnal motions.

higher than those for the sun-spots and reversing layer. The reversing layer gives the lowest values, with the spots intermediate. Adams' spectroscopic observations for λ 4227 and *Hα* give velocities considerably higher. The velocities, then, derived by the different methods of observations show a regular progression which conforms with our idea of the succession of levels in the solar atmosphere in which the various types

of observations were made, the higher levels giving the more rapid motions. Adams states the relation in these words: "These results are all satisfied by a law of increase of angular velocity and decrease of equatorial acceleration with increasing altitude above the Sun's surface." As between the mean of the spectroscopic observations and the present series of observations on the flocculi the "decrease of equatorial acceleration" does not seem to hold. The reversing layer is the lowest stratum and shows lowest velocities. The faculae and flocculi are probably elevated high in the general stratum of the reversing layer, the spots being depressions in these elevated areas. The hydrogen which rises high in the solar atmosphere gives the highest velocities yet observed. Though we know that calcium rises high in the solar atmosphere and therefore the line λ 4227 should give, on this interpretation, high velocities, it is not clear why the velocities should be higher than those derived for the calcium flocculi. However, a similar discrepancy is found between the hydrogen flocculi, for which Hale finds the value, $\xi = 14°.6$ at the equator, and the $H\alpha$ line, for which Adams finds 15°.0. It may of course be that the absorption producing the lines $H\alpha$ and λ 4227 at the limb takes place in a higher level than that in which lie the flocculi, or that the velocities of the flocculi are somewhat vestigial of the lower levels from which they sprang.

# ADDENDUM I

## AREAS OF THE FLOCCULI

An idea of the distribution of the flocculi can be deduced by estimating the area covered by flocculi in the different zones. In the method of measurement used in the solar rotation where the plates are projected on a globe with meridians and parallels ruled upon it, it is a fairly simple matter to determine the area of the flocculi by counting the square degrees covered by them. These counts were made in spherical quadrilaterals of ten degrees on a side. The measures were confined to an area within 40° of the central meridian and 50° of the equator. A sample of the record is given in the following table:

TABLE XIV

AREA COVERED BY FLOCCULI. SAMPLE RECORD OF ONE PLATE, No. 580

| LATITUDE | LONGITUDE | | | | | | | | TOTAL IN ZONE |
|---|---|---|---|---|---|---|---|---|---|
| | East of Central Meridian | | | | West of Central Meridian | | | | |
| | −40° to −30° | −30° to −20° | −20° to −10° | −10° to 0° | 0° to 10° | 10° to 20° | 20° to 30° | 30° to 40° | |
| 50° to 40° ... | 1 | 4 | 4 | 3 | 4 | 2 | 4 | 5 | 27 |
| 40 to 30 ... | 4 | 4 | 7 | 5 | 4 | 2 | 4 | 7 | 37 |
| 30 to 20 ... | 9 | 11 | 14 | 11 | 10 | 12 | 10 | 10 | 87 |
| 20 to 10 ... | 2 | 4 | 5 | 4 | 40 | 41 | 6 | 6 | 108 |
| 10 to 0 ... | 4 | 3 | 2 | 3 | 4 | 5 | 4 | 5 | 30 |
| 0 to −10 ... | 3 | 4 | 2 | 4 | 8 | 4 | 3 | 6 | 34 |
| −10 to −20 ... | 19 | 40 | 9 | 4 | 6 | 4 | 7 | 6 | 95 |
| −20 to −30 ... | 45 | 70 | 29 | 5 | 4 | 7 | 4 | 5 | 169 |
| −30 to −40 ... | 6 | 5 | 4 | 4 | 5 | 7 | 2 | 3 | 36 |
| −40 to −50 ... | 5 | 3 | 6 | 3 | 1 | 4 | 1 | 1 | 24 |

The estimates are necessarily very rough because the flocculi themselves vary in brightness and the density of the various plates is not uniform. But it is hoped that as the estimates were made by one observer they will be fairly consistent and show the latitudes of maximum flocculation with considerable accuracy. These counts were not made throughout the whole series but were discontinued for plates subsequent to June 8, 1905. Table XV gives a summary of the distribution for each plate, that is, the total square degrees in each zone for forty degrees of longitude on either side of the central meridian.

The sums at the foot of the table show the degree of flocculation according to latitude, with maxima in the two hemispheres in the neighborhood of 15°. The results in this table have been considered from two other points of view: first, to find if the degree of flocculation changed during the period involved; and second, to see if the zones of maximum flocculation shifted.

To accomplish the first of these objects the series was divided into three sections with an equal number of plates in each section, with results shown in Table XVI and platted on the right side of Figure 10. It is at once apparent that the curves are quite similar in character and comparable in height, indicating no decided change of flocculation. This is of course also shown in the totals for the three series given in the table. No curve is drawn for the total flocculation of the whole series as its form can at once be seen as a summation of the three curves given.

TABLE XV

AREAS COVERED BY THE FLOCCULI

| Plate Number | +50° to +40° | +40° to +30° | +30° to +20° | +20° to +10° | +10° to 0° | 0° to −10° | −10° to −20° | −20° to −30° | −30° to −40° | −40° to −50° |
|---|---|---|---|---|---|---|---|---|---|---|
| 580 | 27 | 37 | 87 | 108 | 30 | 34 | 95 | 169 | 36 | 24 |
| 605 | 1 | 11 | 34 | 59 | 17 | 14 | 79 | 134 | 18 | 5 |
| 611 | 25 | 42 | 65 | 69 | 23 | 27 | 105 | 152 | 28 | 20 |
| 449 | 32 | 37 | 45 | 54 | 29 | 22 | 66 | 80 | 40 | 38 |
| 452 | 52 | 49 | 59 | 64 | 51 | 54 | 56 | 97 | 40 | 36 |
| 480 | 31 | 59 | 129 | 91 | 41 | 38 | 54 | 85 | 50 | 49 |
| 485 | 48 | 78 | 182 | 75 | 52 | 42 | 50 | 76 | 27 | 25 |
| 494 | 44 | 71 | 130 | 68 | 54 | 49 | 66 | 67 | 49 | 43 |
| 502 | 38 | 72 | 96 | 53 | 46 | 45 | 48 | 52 | 41 | 34 |
| 503 | 22 | 48 | 73 | 36 | 33 | 43 | 45 | 43 | 48 | 36 |
| 516 | 40 | 51 | 102 | 94 | 40 | 34 | 51 | 92 | 97 | 40 |
| 519 | 42 | 37 | 115 | 77 | 32 | 39 | 34 | 59 | 70 | 44 |
| 523 | 43 | 60 | 131 | 81 | 45 | 41 | 93 | 85 | 69 | 46 |
| 828 | 41 | 45 | 71 | 116 | 36 | 25 | 62 | 77 | 40 | 36 |
| 832 | 41 | 76 | 81 | 127 | 48 | 40 | 76 | 96 | 44 | 35 |
| 854 | 67 | 71 | 82 | 94 | 52 | 61 | 142 | 85 | 54 | 44 |
| 858 | 55 | 69 | 93 | 102 | 54 | 59 | 156 | 98 | 37 | 33 |
| 864 | 66 | 75 | 89 | 137 | 83 | 47 | 137 | 66 | 39 | 33 |
| 867 | 48 | 64 | 93 | 122 | 65 | 41 | 131 | 48 | 34 | 29 |
| 869 | 69 | 55 | 75 | 158 | 74 | 39 | 65 | 52 | 36 | 43 |
| 872 | 45 | 56 | 94 | 164 | 69 | 59 | 81 | 67 | 61 | 44 |
| 881 | 64 | 66 | 108 | 100 | 64 | 72 | 73 | 47 | 41 | 36 |
| 891 | 50 | 59 | 72 | 189 | 45 | 47 | 180 | 59 | 53 | 59 |
| 897 | 61 | 64 | 76 | 196 | 63 | 60 | 161 | 59 | 58 | 50 |
| 913 | 55 | 63 | 103 | 230 | 65 | 57 | 158 | 47 | 41 | 47 |
| 917 | 47 | 45 | 62 | 104 | 43 | 35 | 69 | 43 | 36 | 44 |
| 919 | 41 | 50 | 73 | 80 | 36 | 38 | 56 | 89 | 59 | 52 |
| 923 | 63 | 70 | 133 | 150 | 62 | 42 | 54 | 94 | 50 | 34 |
| 928 | 53 | 56 | 97 | 70 | 52 | 45 | 55 | 87 | 37 | 37 |
| 932 | 45 | 45 | 79 | 81 | 33 | 32 | 61 | 90 | 35 | 47 |
| 946 | 42 | 45 | 56 | 113 | 54 | 48 | 49 | 48 | 33 | 36 |
| 951 | 52 | 48 | 54 | 85 | 33 | 35 | 79 | 42 | 30 | 23 |
| 962 | 51 | 54 | 68 | 80 | 71 | 57 | 62 | 158 | 43 | 46 |
| 967 | 47 | 56 | 79 | 84 | 57 | 50 | 70 | 151 | 63 | 52 |
| 976 | 62 | 74 | 131 | 169 | 90 | 82 | 123 | 114 | 59 | 86 |
| 982 | 72 | 71 | 121 | 147 | 55 | 49 | 86 | 78 | 47 | 58 |
| 989 | 43 | 45 | 84 | 133 | 46 | 35 | 61 | 47 | 34 | 33 |
| 994 | 47 | 43 | 78 | 75 | 32 | 38 | 54 | 38 | 33 | 26 |
| 1004 | 44 | 58 | 80 | 79 | 49 | 46 | 49 | 41 | 46 | 35 |
| 1007 | 37 | 46 | 57 | 97 | 41 | 42 | 82 | 48 | 43 | 32 |
| 1017 | 43 | 49 | 53 | 158 | 40 | 35 | 103 | 63 | 40 | 53 |
| 1025 | 49 | 50 | 48 | 141 | 49 | 35 | 112 | 70 | 37 | 39 |
| 1030 | 59 | 67 | 66 | 151 | 63 | 51 | 147 | 72 | 49 | 65 |
| 1035 | 49 | 54 | 82 | 154 | 52 | 48 | 98 | 59 | 46 | 44 |
| 1051 | 37 | 48 | 63 | 48 | 34 | 39 | 77 | 93 | 33 | 32 |
| 1054 | 62 | 81 | 83 | 53 | 60 | 63 | 96 | 112 | 56 | 56 |
| 1068 | 59 | 62 | 57 | 114 | 36 | 35 | 46 | 48 | 50 | 57 |
| 1072 | 46 | 55 | 54 | 136 | 47 | 50 | 75 | 61 | 49 | 35 |
| 1075 | 41 | 49 | 51 | 157 | 46 | 36 | 85 | 64 | 37 | 31 |
| 1085 | 44 | 43 | 56 | 141 | 29 | 31 | 106 | 63 | 35 | 32 |
| 1089 | 41 | 49 | 73 | 114 | 56 | 46 | 164 | 77 | 40 | 30 |
| 1097 | 50 | 47 | 71 | 71 | 42 | 52 | 88 | 131 | 61 | 36 |
| 1108 | 43 | 44 | 46 | 50 | 34 | 44 | 60 | 83 | 35 | 37 |
| 1113 | 37 | 42 | 57 | 65 | 37 | 41 | 71 | 104 | 39 | 35 |
| 1118 | 46 | 42 | 91 | 70 | 34 | 43 | 42 | 49 | 37 | 29 |
| 1122 | 67 | 70 | 142 | 137 | 59 | 61 | 74 | 101 | 65 | 53 |
| 1130 | 56 | 68 | 147 | 154 | 59 | 64 | 94 | 128 | 66 | 51 |
| 1142 | 52 | 60 | 69 | 143 | 44 | 53 | 134 | 70 | 74 | 47 |
| 1147 | 51 | 54 | 67 | 116 | 51 | 43 | 110 | 53 | 74 | 56 |
| 1154 | 57 | 62 | 71 | 134 | 47 | 55 | 63 | 55 | 75 | 56 |
| 1160 | 51 | 55 | 130 | 71 | 48 | 53 | 60 | 68 | 62 | 43 |
| 1167 | 51 | 62 | 111 | 199 | 86 | 70 | 62 | 56 | 62 | 47 |
| 1173 | 55 | 56 | 92 | 199 | 74 | 61 | 132 | 84 | 56 | 43 |
| 1182 | 46 | 68 | 65 | 193 | 58 | 43 | 134 | 83 | 59 | 35 |
| 1187 | 58 | 60 | 81 | 152 | 67 | 56 | 147 | 74 | 38 | 51 |
| 1207 | 46 | 65 | 89 | 122 | 58 | 41 | 75 | 80 | 51 | 50 |
| 1218 | 63 | 90 | 106 | 154 | 76 | 60 | 116 | 151 | 73 | 60 |
| 1234 | 58 | 76 | 99 | 138 | 53 | 39 | 138 | 101 | 56 | 43 |

TABLE XV—*Continued*

| Plate Number | +50° to +40° | +40° to +30° | +30° to +20° | +20° to +10° | +10° to 0° | 0° to −10° | −10° to −20° | −20° to −30° | −30° to −40° | −40° to −50° |
|---|---|---|---|---|---|---|---|---|---|---|
| 1244 | 44 | 52 | 66 | 106 | 44 | 40 | 166 | 89 | 45 | 38 |
| 1266 | 51 | 56 | 64 | 94 | 59 | 62 | 145 | 107 | 52 | 38 |
| 1270 | 61 | 69 | 76 | 72 | 55 | 47 | 116 | 95 | 64 | 49 |
| 1294 | 55 | 116 | 72 | 78 | 74 | 56 | 115 | 70 | 82 | 59 |
| 1295 | 44 | 53 | 65 | 86 | 57 | 53 | 67 | 97 | 60 | 45 |
| 1301 | 45 | 67 | 66 | 86 | 70 | 59 | 85 | 105 | 64 | 49 |
| 1311 | 56 | 55 | 88 | 100 | 46 | 44 | 65 | 74 | 62 | 39 |
| 1314 | 69 | 71 | 108 | 111 | 70 | 72 | 84 | 78 | 59 | 39 |
| 1318 | 54 | 55 | 92 | 140 | 42 | 49 | 61 | 97 | 77 | 47 |
| 1324 | 52 | 64 | 114 | 109 | 72 | 69 | 114 | 136 | 57 | 37 |
| 1329 | 54 | 58 | 96 | 102 | 54 | 52 | 73 | 124 | 39 | 35 |
| 1336 | 71 | 91 | 76 | 105 | 79 | 58 | 75 | 75 | 68 | 41 |
| 1344 | 63 | 88 | 74 | 130 | 90 | 48 | 63 | 73 | 53 | 37 |
| 1348 | 72 | 88 | 69 | 141 | 76 | 61 | 74 | 63 | 56 | 32 |
| 1354 | 58 | 69 | 61 | 164 | 85 | 60 | 65 | 75 | 63 | 48 |
| 1362 | 41 | 56 | 110 | 119 | 53 | 43 | 170 | 96 | 47 | 42 |
| 1366 | 49 | 63 | 119 | 132 | 76 | 49 | 153 | 79 | 56 | 44 |
| 1370 | 44 | 53 | 102 | 92 | 46 | 34 | 114 | 69 | 49 | 33 |
| 1380 | 45 | 47 | 74 | 65 | 45 | 51 | 119 | 75 | 47 | 31 |
| 1391 | 34 | 43 | 65 | 89 | 49 | 45 | 54 | 59 | 50 | 37 |
| 1394 | 51 | 49 | 77 | 80 | 57 | 53 | 70 | 121 | 51 | 39 |
| 1404 | 68 | 71 | 86 | 127 | 69 | 44 | 64 | 58 | 45 | 27 |
| 1408 | 50 | 53 | 61 | 129 | 53 | 37 | 48 | 45 | 43 | 38 |
| 1561 | 45 | 55 | 55 | 80 | 51 | 42 | 146 | 92 | 56 | 41 |
| 1565 | 33 | 48 | 55 | 90 | 82 | 46 | 142 | 96 | 57 | 47 |
| 1572 | 35 | 44 | 72 | 176 | 105 | 38 | 133 | 96 | 49 | 44 |
| 1419 | 26 | 39 | 77 | 239 | 42 | 28 | 64 | 63 | 37 | 20 |
| 1423 | 30 | 32 | 74 | 219 | 48 | 39 | 68 | 67 | 44 | 24 |
| 1429 | 42 | 77 | 144 | 201 | 42 | 33 | 85 | 70 | 35 | 22 |
| 1432 | 39 | 62 | 129 | 166 | 35 | 29 | 68 | 45 | 32 | 25 |
| 1438 | 29 | 59 | 120 | 77 | 39 | 34 | 54 | 31 | 31 | 26 |
| 1443 | 28 | 45 | 66 | 81 | 42 | 27 | 54 | 38 | 32 | 33 |
| 1450 | 31 | 37 | 48 | 66 | 34 | 32 | 87 | 49 | 30 | 28 |
| 1453 | 31 | 32 | 55 | 57 | 37 | 30 | 103 | 47 | 44 | 33 |
| 1467 | 33 | 42 | 103 | 172 | 52 | 54 | 81 | 53 | 38 | 25 |
| 1470 | 32 | 54 | 119 | 181 | 94 | 53 | 88 | 50 | 35 | 28 |
| 1476 | 27 | 31 | 120 | 162 | 91 | 35 | 57 | 41 | 33 | 29 |
| 1516 | 37 | 42 | 112 | 109 | 61 | 41 | 102 | 47 | 34 | 35 |
| 1519 | 42 | 50 | 69 | 101 | 59 | 41 | 94 | 80 | 33 | 33 |
| 1529 | 28 | 31 | 41 | 46 | 87 | 37 | 156 | 52 | 26 | 28 |
| 1535 | 61 | 61 | 69 | 80 | 60 | 49 | 244 | 122 | 71 | 48 |
| 1543 | 33 | 35 | 65 | 237 | 133 | 39 | 46 | 39 | 46 | 30 |
| 1546 | 46 | 63 | 89 | 271 | 145 | 47 | 41 | 43 | 48 | 31 |
| 1588 | 50 | 41 | 55 | 51 | 45 | 43 | 135 | 95 | 46 | 36 |
| 1590 | 42 | 43 | 52 | 42 | 35 | 36 | 80 | 74 | 33 | 30 |
| 1601 | 30 | 42 | 55 | 176 | 48 | 25 | 47 | 38 | 29 | 24 |
| 1604 | 48 | 58 | 95 | 183 | 84 | 41 | 51 | 57 | 39 | 39 |
| 1626 | 34 | 40 | 53 | 85 | 71 | 31 | 40 | 38 | 35 | 34 |
| 1630 | 29 | 36 | 66 | 39 | 29 | 24 | 32 | 26 | 25 | 23 |
| 1634 | 38 | 45 | 74 | 45 | 39 | 35 | 46 | 37 | 30 | 34 |
| 1640 | 42 | 54 | 92 | 90 | 76 | 42 | 50 | 42 | 33 | 42 |
| 1644 | 34 | 54 | 78 | 132 | 55 | 29 | 44 | 38 | 24 | 39 |
| 1648 | 28 | 38 | 50 | 102 | 39 | 34 | 37 | 27 | 21 | 21 |
| 1656 | 45 | 53 | 49 | 116 | 54 | 33 | 50 | 44 | 28 | 36 |
| 1662 | 49 | 56 | 57 | 128 | 56 | 80 | 54 | 44 | 33 | 37 |
| Total | 5678 | 6835 | 10096 | 14203 | 6795 | 5524 | 10722 | 9154 | 5730 | 4765 |

## TABLE XVI

SUMMARY OF AREAS OF FLOCCULATION IN THREE GROUPS WITH EQUAL NUMBERS OF PLATES IN EACH

| Series | No. of Plates | +50° to +40° | +40° to +30° | +30° to +20° | +20° to +10° | +10° to 0° | 0° to −10° | −10° to −20° | −20° to −30° | −30° to −40° | −40° to −50° | Total by Series |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| I | 41 | 1896 | 2270 | 3590 | 4369 | 2005 | 1798 | 3377 | 3223 | 1839 | 1623 | 25990 |
| II | 41 | 2223 | 2631 | 3354 | 5001 | 2372 | 2143 | 3974 | 3548 | 2316 | 1826 | 29388 |
| III | 40 | 1559 | 1934 | 3152 | 4833 | 2418 | 1583 | 3371 | 2383 | 1575 | 1316 | 24124 |
| Total | 122 | 5678 | 6835 | 10096 | 14203 | 6795 | 5524 | 10722 | 9154 | 5730 | 4765 | 79502 |

I = Plate 449, Aug. 6, '03, to Plate 1017, June 18, '04
II = Plate 1025, June 20, '04, to Plate 1354, Oct. 29, '04
III = Plate 1362, Nov. 1, '04, to Plate 1662, June 8, '05

For the second study the plates were divided into three series covering equal intervals of time. This gave quite different numbers of plates in the three groups, as is seen in Table XVII. These results have been platted on the left side of Figure 10, where the maxima of the curves are indicated. It will be seen

TABLE XVII

SUMMARY OF AREAS OF FLOCCULATION, GROUPED ACCORDING TO DATES

| Series | No. of Plates | +50° to +40° | +40° to +30° | +30° to +20° | +20° to +10° | +10° to 0° | 0° to −10° | −10° to −20° | −20° to −30° | −30° to −40° | −40° to −50° | Total by Series |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| I..... | 13 | 445 | 652 | 1248 | 929 | 493 | 482 | 842 | 1191 | 613 | 440 | 7335 |
| II..... | 69 | 3674 | 4249 | 5696 | 8441 | 3884 | 3459 | 6509 | 5580 | 3542 | 3009 | 48043 |
| III..... | 40 | 1559 | 1934 | 3152 | 4833 | 2418 | 1583 | 3371 | 2383 | 1575 | 1316 | 24124 |
| Total.. | 122 | 5678 | 6835 | 10096 | 14203 | 6795 | 5524 | 10722 | 9154 | 5730 | 4765 | 79502 |

I = Plate 449, Aug. 6, '03, to Plate 611, Oct. 11, '03
II = Plate 828, Mar. 7, '04, to Plate 1354, Oct. 29, '04
III = Plate 1362, Nov. 1, '04, to Plate 1662, June 8, '05

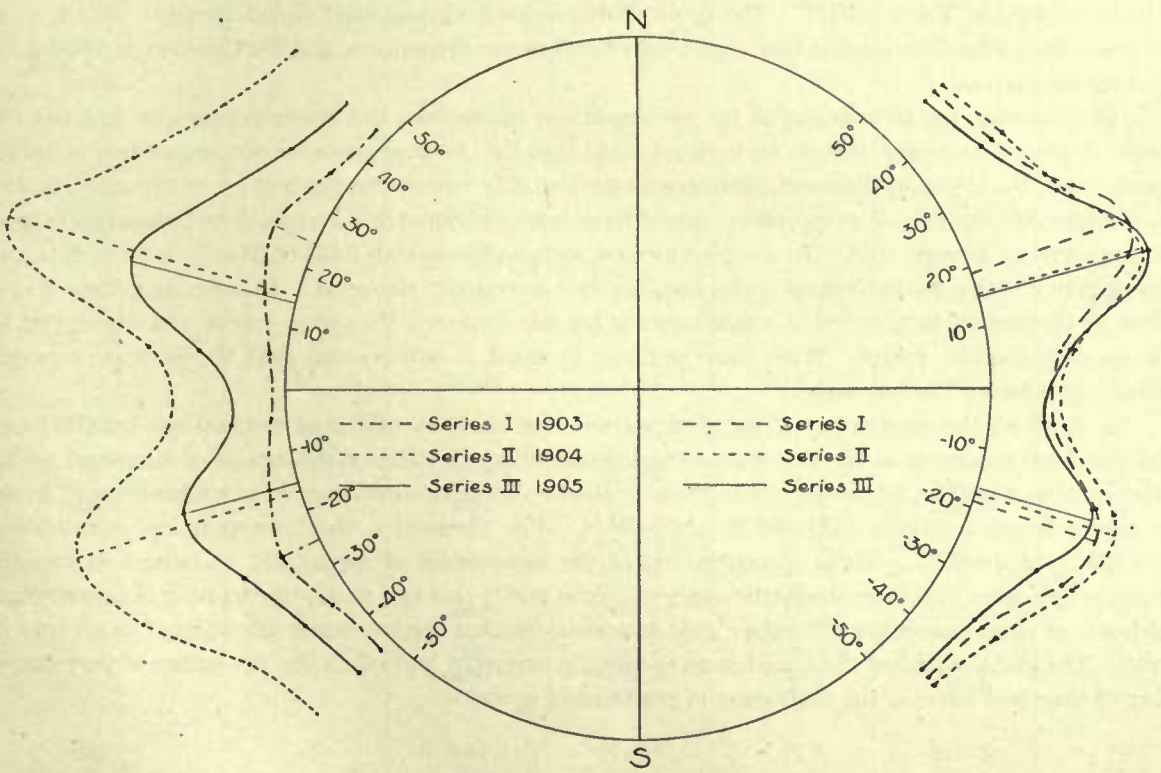



FIG. 10.—Relative areas covered by the flocculi. On the left the observations are grouped by dates to detect movement of the zone of maximum flocculation. On the right they are grouped in series with equal numbers of plates to compare the amounts of flocculation during the period.

that the maxima shift toward the equator during the period between 1903 and 1905. This shift is also shown in the curves at the right of the table. This result was of course to have been expected as the progressive movement of the spots toward the equator during the progress of a sun-spot cycle was long ago recognized. The large areas of flocculi are either associated with the spots or are found in the latitude of maximum spottedness.

# ADDENDUM II

## POSITIONS OF SUN-SPOTS

The measurement of the Rumford spectroheliograms included the determination of the positions of the sun-spots. In general their positions were not measured at distances greater than 50° from the central meridian. It is understood, of course, that the sun-spot positions were measured on the globe in the same method as the flocculi, but the heliographic longitude of the central meridian has been added so that the spot positions are referred to the same meridian as are the Greenwich positions.

The spot positions have not been discussed for a determination of the rotation period because they were too few in number and therefore it was considered unwarranted in view of the far richer material collected at Greenwich. It is thought, however, desirable that these positions should be published and they are here collected in Table XVIII. The spots of this series are designated alphabetically. So far as has been possible an identification has been made with the Greenwich numbers, and the Greenwich positions are added for comparison.

In discussing the comparison of the spot positions taken from the spectroheliograms and from the Greenwich photoheliograms, it must be borne in mind that the observations were not simultaneous and that in many cases the spots on the spectroheliograms are partially covered or bridged by overhanging flocculi. In a considerable number of cases several nuclei have been measured which on a direct photograph might have appeared as a single spot. In complex groups, such as Greenwich 5473 of March 5, 1905, it is quite impossible to identify the individual nuclei because they are rapidly changing. In some such cases it is the custom at Greenwich to give but a single position for the center of the group rather than to record the positions of individual nuclei. With these cautions in mind, it will be seen that the agreement is quite satisfactory between the two series.

A check on the consistency of the observations was made by taking at random one hundred spots which had been measured at the two stations and determining the extreme differences of measured position on the same spot both in longitude and latitude in the two series and totaling them without regard to sign. The spectroheliograms give $[\Delta\lambda] = 95°.6$, $[\Delta\phi] = 55°.4$. For Greenwich the corresponding quantities are $[\Delta\lambda] = 125°.5$, $[\Delta\phi] = 60°.5$. These quantities are of the same order of magnitude. Changes in measured position which enter into these summations are of course partly real and partly due to error of measurement. Whichever of these causes prevails, the check demonstrates that the two series are affected to about a like degree. The globe machine, then, makes no sacrifice in accuracy and offers the advantage of very marked saving of time and labor in the derivation of positions of spots.

TABLE XVIII

COMPARISON OF SUN-SPOT POSITIONS WITH GREENWICH PHOTOHELIOGRAPHIC RESULTS

| PLATE NUMBER AND DATE | LETTER | GREENWICH NUMBER | SPECTROHELIOGRAPH | | GREENWICH | |
|---|---|---|---|---|---|---|
| | | | Longitude | Latitude | Longitude | Latitude |
| 449 Aug. 6, '03 $1^h50^m$ | $o'$ | 5068 | 308°.4 | −21°.8 | 306°.4 | −22°.7 |
| | $o''$ | | 308.6 | −22.3 | | |
| 452 Aug. 7, '03 $8^h39^m$ | $o$ | 5068$a$ | 309.1 | −22.4 | 307.9 | −22.0 |
| 480 Aug. 17, '03 $3^h10^m$ | $p$ | 5072 | 237.0 | 20.5 | 235.9 | 20.5 |
| | $q$ | 5072 | 238.2 | 20.2 | 237.2 | 20.3 |
| | $r$ | 5072 | 239.5 | 19.9 | 238.9 | 20.0 |
| | $s$ | ..... | 204.5 | −18.5 | ..... | ..... |
| 485 Aug. 18, '03 $10^h08^m$ | $p$ | 5072 | 237.2 | 20.8 | 236.8 | 20.5 |
| | $q$ | 5072 | 238.2 | 20.3 | 237.7 | 20.1 |
| | $q'$ | 5072 | 229.7 | 22.4 | 229.3 | 21.9 |
| 494 Aug. 19, '03 $3^h38^m$ | $q$ | 5072 | 237.1 | 21.0 | 237.2 | 20.7 |
| 503 Aug. 21, '03 $10^h05^m$ | $t$ | 5077 | 103.4 | 25.1 | 102.5 | 25.6 |
| 516 Sept. 10, '03 $4^h20^m$ | $u$ | 5083$a$ | 193.1 | −18.0 | 192.5 | −18.1 |
| 519 Sept. 11, '03 $10^h38^m$ | $u$ | 5083$a$ | 192.4 | −18.8 | 192.2 | −18.1 |
| 523 Sept. 12, '03 $10^h00^m$ | $u$ | 5083$a$ | 194.0 | −18.3 | 192.3 | −17.6 |
| 580 Oct. 9, '03 $8^h22^m$ | $a$ | 5091$a$ | 245.5 | 12.9 | 245.3 | 13.0 |
| | $b$ | 5092$a$ | 214.7 | −22.0 | 214.1 | −21.7 |
| | $c$ | 5094 | 284.7 | −21.0 | 285.0 | −21.5 |
| | $d$ | | 208.9 | −23.1 | | |
| | $e$ | 5093 | 206.5 | −22.5 | 205.5 | −21.2 |
| | $f$ | | 206.2 | −21.0 | | |
| | $k$ | | 210.0 | −21.2 | | |
| | $g$ | 5093 | 200.2 | −18.3 | 200.2 | −18.7 |
| | $h$ | 5093 | 197.8 | −19.8 | 197.1 | −19.5 |
| | $i$ | 5093 | 197.8 | −21.3 | 197.0 | −21.4 |
| | $j$ | 5093 | 197.7 | −22.3 | 197.7 | −23.2 |
| | $l$ | 5093 | 200.2 | −20.8 | 199.7 | −20.8 |
| 605 Oct. 10, '03 $10^h59^m$ | $a$ | 5091$a$ | 245.3 | 12.8 | 245.2 | 12.9 |
| | $b$ | 5092$a$ | 214.5 | −21.9 | 214.6 | −21.7 |
| | $c''$ | 5093 | 207.8 | −21.5 | 206.0 | −21.1 |
| | $g$ | 5093 | 200.2 | −18.3 | 199.7 | −18.0 |
| | $i$ | 5093 | 197.6 | −21.1 | 197.7 | −21.0 |
| | $l$ | ..... | 200.3 | −21.0 | ..... | ..... |
| | $m$ | 5093 | 201.2 | −19.7 | 200.5 | −20.0 |
| 611 Oct. 11, '03 $1^h17^m$ | $a$ | 5091$a$ | 245.3 | 13.1 | 244.9 | 12.8 |
| | $b$ | 5092$a$ | 214.2 | −22.0 | 214.0 | −22.2 |
| | $k'$ | ..... | 209.8 | −20.6 | ..... | ..... |
| | $e'$ | 5093 | 206.1 | −21.5 | 206.0 | −21.2 |
| | $g$ | 5093 | 199.6 | −18.1 | 199.8 | −18.4 |
| | $h$ | | 196.8 | −19.4 | | |
| | $i$ | 5093 | 197.5 | −20.5 | 196.9 | −21.1 |
| | $j$ | | 196.9 | −21.6 | | |
| | $l$ | 5093 | 199.9 | −20.3 | 200.6 | −20.7 |

TABLE XVIII—*Continued*

| Plate Number and Date | Letter | Greenwich Number | Spectroheliograph | | Greenwich | |
|---|---|---|---|---|---|---|
| | | | Longitude | Latitude | Longitude | Latitude |
| 828 Mar. 7, '04 $2^h22^m$ | *v* | ..... | 24°.2 | −18°.6 | No photo | graph |
| 832 Mar. 8, '04 $9^h50^m$ | *v* | 5176 | 24.1 | −18.6 | 23°.9 | −18°.4 |
| | *w* | 5179*b* | 67.3 | 17.1 | 67.1 | 16.5 |
| 854 Apr. 12, '04 $9^h26^m$ | *x* | 5202*a* | 278.9 | −14.8 | 278.8 | −14.3 |
| | *y* | 5202*b* | 271.4 | −18.1 | 271.7 | −18.0 |
| | *z* | 5202 | 274.5 | −18.9 | 274.2 | −18.6 |
| | *aa* | 5204*a* | 244.4 | 6.0 | 244.1 | 6.5 |
| 858 Apr. 13, '04 $11^h33^m$ | *x* | 5202*a* | 278.9 | −15.0 | 278.8 | −14.3 |
| | *y* | 5202*b* | 271.3 | −17.9 | 272.5 | −17.7 |
| | *z* | 5202 | 274.8 | −18.6 | 274.9 | −16.7 |
| | *z′* | | 273.2 | −17.9 | | |
| | *z″* | | 273.3 | −18.8 | | |
| | *aa* | 5204*a* | 244.3 | 6.0 | 244.4 | 6.7 |
| 864 Apr. 14, '04 $10^h49^m$ | *x* | 5202*a* | 279.1 | −14.8 | 278.7 | −14.6 |
| | *x′* | | 279.9 | −13.3 | | |
| | *x″* | | 279.2 | −13.3 | | |
| | *y* | 5202*b* | 271.0 | −17.8 | 272.9 | −17.4 |
| | *y′* | ..... | 272.6 | −18.1 | ..... | ..... |
| | *z* | 5202 | 275.1 | −18.5 | 273.8 | −19.8 |
| | *z′* | | 274.0 | −18.7 | | |
| | *aa* | 5204*a* | 244.5 | 6.0 | 244.6 | 6.5 |
| 867 Apr. 16, '04 $10^h26^m$ | *x* | 5202*a* | 280.1 | −14.3 | 279.7 | −14.7 |
| | *y* | 5202*b* | 271.1 | −17.2 | 271.7 | −17.2 |
| | *y″* | ..... | 272.8 | −16.6 | ..... | ..... |
| | *z* | ..... | 275.9 | −18.1 | ..... | ..... |
| | *aa* | 5204*a* | 245.1 | 6.5 | 245.2 | 6.6 |
| | *ab* | 5206*a* | 197.8 | 17.0 | 197.5 | 18.0 |
| | *ac* | ..... | 280.7 | −16.3 | ..... | ..... |
| 869 Apr. 18, '04 $11^h21^m$ | *y* | 5202*b* | 270.7 | −17.0 | 272.4 | −17.4 |
| | *aa* | 5204*a* | 246.0 | 6.9 | 245.5 | 6.5 |
| | *ab* | 5206*a* | 197.6 | 18.1 | 197.4 | 18.1 |
| 872 Apr. 19, '04 $9^h31^m$ | *aa* | 5204*a* | 246.0 | 7.0 | 246.0 | 6.7 |
| | *ab* | 5206*a* | 197.4 | 18.2 | 197.5 | 18.1 |
| 876 Apr. 20, '04 $11^h52^m$ | *ab* | 5206*a* | 197.1 | 18.6 | 197.1 | 18.4 |
| 881 Apr. 21, '04 $9^h22^m$ | *ab* | 5206*a* | 196.9 | 18.9 | 196.9 | 18.8 |
| | *ad* | 5208 | 200.7 | − 8.4 | 199.5 | − 8.4 |
| | *ae* | 5208 | 197.4 | − 8.7 | 194.7 | − 8.2 |
| 891 Apr. 26, '04 $12^h00^m$ | *af* | 5210*a* | 111.4 | 12.6 | 110.8 | 12.6 |
| | *ag* | 5209*a* | 105.7 | −13.0 | 104.9 | −13.1 |
| | *ah* | 5210 | 107.0 | 14.1 | 105.5 | 13.3 |
| | *aj* | | 105.9 | 14.3 | | |
| | *ak* | | 104.7 | 13.3 | | |
| | *al* | | 104.2 | 12.4 | | |
| | *ai* | 5210 | 99.3 | 15.0 | 100.1 | 14.4 |
| | *am* | | 100.9 | 15.9 | | |
| 897 Apr. 27, '04 $10^h16^m$ | *af* | 5210*a* | 111.4 | 12.3 | 111.1 | 12.0 |
| | *ag* | 5209*a* | 105.9 | −13.2 | 105.4 | −13.1 |
| | *ah* | 5210 | 107.4 | 14.0 | 107.1 | 13.6 |
| | *ai* | 5210 | 99.6 | 15.4 | 98.9 | 14.8 |
| | | | 99.1 | 14.8 | | |

TABLE XVIII—*Continued*

| Plate Number and Date | Letter | Greenwich Number | Spectroheliograph | | Greenwich | |
|---|---|---|---|---|---|---|
| | | | Longitude | Latitude | Longitude | Latitude |
| 906 Apr. 28, '04 $11^h34^m$ | *ag* | 5209*a* | 107°.1<br>104.8 | −13°.2<br>−12.9 | 105°.4 | −13°.0 |
| | *af* | 5210*a* | 111.0<br>109.8 | 12.6<br>12.9 | 111.2 | 12.3 |
| | *ah* | 5210 | 107.5 | 14.0 | 107.7 | 13.8 |
| | *ai* | 5210 | 98.8 | 15.0 | 99.1 | 14.7 |
| 913 Apr. 29, '04 $11^h51^m$ | *ag* | 5209*a* | 107.4<br>105.0 | −13.6<br>−12.9 | 105.6 | −13.1 |
| | *af* | 5210*a* | 109.8 | 12.8 | 111.0 | 11.6 |
| | *an* | 5214 | 60.1 | 17.8 | 59.4 | 18.7 |
| 917 Apr. 30, '04 $11^h13^m$ | *ag* | 5209*a* | 107.5<br>105.2 | −13.0<br>−12.6 | 105.7 | −13.0 |
| | *af* | 5210*a* | 110.0 | 13.0 | 110.5 | 12.7 |
| | *an* | 5214 | 59.9 | 17.5 | 58.5 | 18.3 |
| | *ao* | 5213*a* | 9.0 | −22.3 | 8.1 | −21.5 |
| 919 May 2, '04 $2^h26^m$ | *an* | 5214 | 58.1 | 18.2 | 58.8 | 18.0 |
| | *ao* | 5213*a* | 8.7 | −21.9 | 8.0 | −21.7 |
| | *ap* | ..... | 14.1 | 24.7 | ..... | ..... |
| | *aq* | 5215 | 10.7<br>9.9 | 22.7<br>22.9 | 11.8 | 23.8 |
| 923 May 3, '04 $9^h22^m$ | *ao* | 5213*a* | 8.4 | −21.8 | 7.9 | −21.3 |
| | *ap* | 5215 | 15.3 | 24.6 | 14.4 | 24.3 |
| | *aq* | 5215 | 9.7 | 23.1 | 10.3 | 23.2 |
| 928 May 4, '04 $9^h12^m$ | *ao* | 5213*a* | 5.9 | −21.6 | 7.9 | −21.3 |
| | *ao′* | 5218 | 357.8 | −20.0 | 358.2 | −19.8 |
| | *ap* | 5215 | 15.6 | 24.9 | 13.8 | 23.7 |
| | *aq* | 5215<br>5215 | 9.6<br>10.9 | 23.0<br>23.2 | 9.9<br>11.1 | 23.0<br>23.2 |
| 932 May 5, '04 $9^h37^m$ | *ao′* | 5218*a* | 1.3 | −19.7 | 359.9 | −19.6 |
| | *aq* | 5215 | 9.9 | 24.9 | 10.2 | 23.7 |
| | *ar* | 5217 | 323.6 | 18.2 | 321.7 | 18.7 |
| | *as* | 5217 | 317.3<br>317.2 | 18.8<br>18.2 | 316.7 | 18.9 |
| 946 May 20, '04 $11^h13^m$ | *at* | 5232*a* | 193.6 | 17.5 | 193.4 | 17.5 |
| | *au* | ..... | 98.1 | 12.9 | ..... | ..... |
| 951 May 21, '04 $9^h52^m$ | *at* | 5232*a* | 193.5 | 17.8 | 192.4 | 17.8 |
| | *au* | 5235 | 98.7 | 13.5 | 97.9 | 13.3 |
| | *au′* | 5235 | 101.6 | 12.2 | 99.6 | 12.4 |
| 962 May 31, '04 $11^h56^m$ | *av* | 5240 | 7.8 | −21.9 | 7.4 | −21.1 |
| 967 June 1, '04 $10^h21^m$ | *av* | 5240 | 7.4 | −21.8 | 5.3 | −21.9 |
| 972 June 8, '04 $11^h14^m$ | *aw* | 5246 | 277.4 | 18.7 | 277.1 | 19.0 |
| 976 June 9, '04 $9^h47^m$ | *aw* | 5246 | 277.4 | 18.4 | 274.3 | 18.9 |
| 982 June 10, '04 $10^h57^m$ | *aw* | 5246 | 277.8 | 19.2 | 277.0 | 18.5 |
| | *ax* | 5250 | 228.8 | 18.9 | 229.0 | 19.3 |
| | *ay* | 5251*a* | 185.2 | 11.8 | 184.7 | 12.1 |

TABLE XVIII—*Continued*

| Plate Number and Date | Letter | Greenwich Number | Spectroheliograph | | Greenwich | |
|---|---|---|---|---|---|---|
| | | | Longitude | Latitude | Longitude | Latitude |
| 989 | *aw* | 5246 | 278°.2 | 18°.8 | 277°.5 | 18°.8 |
| June 11, '04 | *ax* | 5250 | 228.6 | 18.9 | 229.4 | 20.1 |
| $8^h46^m$ | *ay* | 5251*a* | 184.7 | 12.0 | 184.4 | 12.6 |
| 994 | | | | | | |
| June 13, '04 | | | 227.2 | 19.6 | | |
| | | | 227.4 | 18.6 | | |
| $10^h07^m$ | *ax* | 5250 | 227.8 | 18.0 | 227.8 | 19.0 |
| | | | 226.8 | 21.1 | | |
| | *ay* | 5251*a* | 185.9 | 12.2 | 185.5 | 12.6 |
| | *az'* | | 233.0 | 20.1 | | |
| | *az''* | 5250 | 231.9 | 20.5 | 231.5 | 19.7 |
| 1004 | *ax'* | 5250 | 225.8 | 21.1 | 226.4 | 21.0 |
| June 14, '04 | | | 226.8 | 19.2 | | |
| $10^h30^m$ | *ax* | 5250 | 227.1 | 18.3 | 228.1 | 18.6 |
| | | | 227.8 | 17.8 | | |
| | *ay* | 5251*a* | 186.5 | 12.2 | 185.7 | 12.7 |
| | *ay'* | | 187.0 | 13.2 | | |
| | *az* | 5250 | 232.7 | 20.1 | 232.1 | 20.1 |
| | *ba* | 5250 | 222.9 | 23.1 | 222.4 | 23.5 |
| 1007 | *bb* | 5253*a* | 121.5 | 12.4 | 120.6 | 12.8 |
| June 16, '04 | *bb'* | | 119.5 | 11.5 | | |
| $9^h41^m$ | *bc* | 5253 | 113.4 | 13.0 | 113.2 | 14.3 |
| | *bd* | 5252*a* | 122.8 | −17.4 | 122.4 | −16.9 |
| | *be* | 5252 | 120.4 | −16.9 | 120.0 | −16.3 |
| | *bf* | 5254*a* | 110.5 | −22.0 | 109.7 | −22.5 |
| 1013 | *bb* | 5253*a* | 120.7 | 12.0 | 120.8 | 12.8 |
| June 17, '04 | *bd* | 5252*a* | 122.8 | −17.5 | 121.6 | −16.5 |
| $10^h54^m$ | *be* | | 121.6 | −17.2 | | |
| | *bf* | 5254*a* | 109.9 | −22.7 | 109.5 | −21.7 |
| 1017 | *bb* | 5253*a* | 120.3 | 12.2 | 120.2 | 12.9 |
| June 18, '04 | *bd* | 5252*a* | 122.6 | −16.8 | 120.9 | −16.8 |
| $9^h18^m$ | *be* | | 121.9 | −16.3 | | |
| | *bf* | 5254*a* | 109.1 | −22.4 | 108.8 | −22.3 |
| 1025 | *bb* | 5253*a* | 120.0 | 12.0 | 119.6 | 12.1 |
| June 20, '04 | *bg* | 5256 | 52.1 | 19.0 | 50.5 | 19.5 |
| $10^h10^m$ | | | | | | |
| 1030 | *bb* | 5253*a* | 119.8 | 12.0 | 119.4 | 12.7 |
| June 21, '04 | *bg* | 5256 | 52.7 | 19.4 | 51.4 | 17.7 |
| $10^h00^m$ | | | | | | |
| 1035 | *bb* | 5253*a* | 119.7 | 11.9 | 119.4 | 11.9 |
| June 22, '04 | *bg* | 5256*a* | 53.0 | 19.4 | 51.9 | 19.8 |
| $9^h56^m$ | | | 51.8 | 19.5 | | |
| | *bh* | 5256*b* | 47.8 | 18.6 | 46.8 | 19.0 |
| | *bi* | | 46.4 | 18.2 | | |
| | *bj* | 5252 | 115.4 | −15.1 | 115.3 | −15.2 |
| | *bk* | 5256 | 42.5 | 19.0 | 41.9 | 19.4 |
| 1039 | *bb* | 5253*a* | 119.7 | 12.5 | 119.3 | 12.0 |
| June 23, '04 | | | 118.9 | 11.5 | | |
| $0^h00^m.5$ | *bg* | 5256*a* | 52.4 | 19.8 | 51.7 | 19.8 |
| | | | 50.5 | 19.5 | | |
| | *bh* | 5256*b* | 47.0 | 18.7 | 46.9 | 18.9 |
| | *bi* | | 46.0 | 18.6 | | |
| | *bj* | 5252 | 117.0 | −15.1 | 115.2 | −15.9 |
| | | | 115.1 | −15.0 | | |
| | *bl* | 5252 | 122.9 | −14.5 | 122.7 | −14.8 |
| 1051 | *bm* | 5259*b* | 315.9 | −19.4 | 315.8 | −18.9 |
| July 1, '04 | *bn* | 5259*a* | 307.4 | −18.9 | 308.3 | −19.2 |
| $9^h21^m$ | *bo* | 5261 | 328.9 | −22.6 | 323.9 | −22.4 |
| | *bp* | 5262*a* | 262.5 | 14.7 | 260.5 | 15.4 |

TABLE XVIII—*Continued*

| Plate Number and Date | Letter | Greenwich Number | Spectroheliograph | | Greenwich | |
|---|---|---|---|---|---|---|
| | | | Longitude | Latitude | Longitude | Latitude |
| 1054 | *bm* | 5259*b* | 316°.7 | −19°.5 | 316°.4 | −19°.5 |
| July 2, '04 | *bp* | 5262*a* | 263.0 | 15.2 | 261.2 | 15.3 |
| 9h12m | *bp′* | | 261.9 | 15.0 | | |
| | *bq* | 5261 | 333.6 | −22.9 | 332.8 | −22.0 |
| 1068 | *br* | 5264*a* | 149.9 | 12.9 | 150.6 | 13.2 |
| July 12, '04 | *bs* | 5264*b* | 140.1 | 12.5 | 140.1 | 12.7 |
| 9h54m | *bt* | | 138.9 | 11.8 | | |
| | *bu* | 5264 | 140.3 | 15.2 | 141.0 | 15.7 |
| 1072 | *br* | 5264*a* | 150.1 | 13.0 | 149.8 | 13.0 |
| July 13, '04 | *bs* | 5264*b* | 140.0 | 12.9 | 141.6 | 13.2 |
| 9h21m | *bt* | | 139.1 | 11.9 | | |
| | *bu* | 5264 | 140.3 | 16.1 | 140.2 | 16.2 |
| 1075 | *br* | 5264*a* | 150.6 | 12.2 | 150.3 | 12.7 |
| July 15, '04 | *bs* | 5264*b* | 139.6 | 12.3 | 139.2 | 12.7 |
| 8h48m | *bt* | | 139.3 | 11.7 | | |
| | *bu′* | 5268*a* | 117.8 | −13.0 | 118.2 | −12.5 |
| | *bv* | 5266 | 109.2 | 13.8 | 107.9 | 13.3 |
| | *bw* | ..... | 107.1 | 11.5 | ..... | ..... |
| | *bx* | 5267 | 180.1 | 16.3 | 180.5 | 16.5 |
| | *by* | 5267 | 183.6 | 16.1 | 183.6 | 16.2 |
| 1085 | *br* | 5264*a* | 151.0 | 12.9 | 150.8 | 12.6 |
| July 16, '04 | *bs* | 5264*b* | 139.6 | 13.2 | 140.1 | 12.5 |
| 10h20m | *bt* | | 139.4 | 12.3 | | |
| | *bu′* | 5268*a* | 118.1 | −12.4 | 118.2 | −12.5 |
| | *bv* | 5266 | 109.0 | 14.9 | 108.8 | 16.6 |
| | *bw* | 5266 | 107.0 | 12.5 | 108.2 | 13.4 |
| 1089 | *br* | 5264*a* | 152.7 | 13.0 | 151.6 | 12.4 |
| July 18, '04 | *bs* | 5264*b* | 139.7 | 13.5 | 140.5 | 12.7 |
| 9h12m | *bt* | | | | | |
| | *bu′* | 5268*a* | 117.7 | −11.4 | 117.8 | −11.2 |
| | *bw* | 5266 | 107.2 | 12.5 | 107.6 | 12.5 |
| | *bz* | | 61.4 | −19.4 | | |
| | *bz′* | 5269*a* | 59.9 | −18.4 | 59.9 | −19.0 |
| | *bz″* | | 58.6 | −18.8 | | |
| 1097 | *bw* | 5266 | 107.5 | 11.9 | 107.3 | 11.8 |
| July 20, '04 | *bz* | 5269*a* | 61.2 | −19.4 | 60.8 | −19.1 |
| 9h01m | *ca* | 5269 | 48.4 | −22.3 | 48.5 | −21.9 |
| | *cb* | | 46.9 | −22.2 | | |
| 1103 | *bz* | 5269*a* | 61.4 | −19.0 | 60.9 | −19.0 |
| July 21, '04. | *ch* | 5272 | 63.9 | 13.8 | 62.7 | 13.8 |
| 8h58m | | | | | | |
| 1108 | *bz* | 5269*a* | 61.1 | −19.0 | 60.8 | −18.9 |
| July 22, '04 | *ch* | 5272 | 64.7 | 13.4 | 63.9 | 13.4 |
| 8h14m | | | | | | |
| 1113 | *bz* | 5269*a* | 60.9 | −18.5 | 60.6 | −18.7 |
| July 23, '04 | *cc* | 5277 | 4.7 | −20.0 | 3.5 | −19.0 |
| 10h37m | *cd* | 5277 | 1.3 | −21.2 | 0.8 | −20.7 |
| | *ce* | 5273*a* | 342.2 | 20.7 | 341.9 | 21.1 |
| | *ch* | 5272 | 66.1 | 12.9 | 65.0 | 12.9 |
| 1118 | *bz* | 5269*a* | 60.4 | −18.8 | 59.6 | −18.1 |
| July 25, '04 | *cc* | 5277 | 4.5 | −20.4 | 5.2 | −19.5 |
| 9h49m | *cf* | 5273*b* | 324.6 | 20.8 | 325.1 | 20.7 |
| | *cg* | 5275 | 320.8 | 24.6 | 320.6 | 24.5 |
| 1122 | *ci* | 5278*a* | 307.3 | 14.2 | 305.9 | 14.9 |
| July 27, '04 | *ci′* | 5280 | 298.7 | 9.4 | 299.7 | 10.2 |
| 8h15m | *cj* | 5278*b* | 298.5 | 14.1 | 297.8 | 14.6 |

TABLE XVIII—*Continued*

| Plate Number and Date | Letter | Greenwich Number | Spectroheliograph | | Greenwich | |
|---|---|---|---|---|---|---|
| | | | Longitude | Latitude | Longitude | Latitude |
| 1130 July 28, '04 $8^h18^m$ | *ci* | 5278*a* | 308°.9 | 14°.1 | 308°.5 | 14°.5 |
| | *cj* | 5278*b* | 298.3 | 14.0 | 298.2 | 14.4 |
| 1142 Aug. 1, '04 $8^h32^m.5$ | *ck* | 5281 | 300.9 | −17.3 | 294.5 | −17.5 |
| | *cl* | | 299.5 | −17.2 | | |
| 1147 Aug. 2, '04 $8^h34^m$ | *ck* | 5281 | 300.6 | −17.2 | 295.0 | −17.6 |
| | *cl* | | 299.7 | −17.1 | | |
| 1154 Aug. 3, '04 $8^h30^m$ | *ck* | 5281 | 299.2 | −17.0 | 299.0 | −17.1 |
| 1160 Aug. 6, '04 $9^h32^m$ | *cm* | 5282 | 257.2 | 10.6 | 259.5 | 11.0 |
| | *cn* | | 261.5 | 11.8 | | |
| | *co* | 5283*a* | 182.6 | 25.9 | 181.7 | 26.1 |
| | *cp* | 5285*a* | 157.0 | 12.7 | 156.4 | 12.7 |
| 1167 Aug. 8, '04 $9^h17^m.5$ | *co* | 5283*a* | 181.5 | 26.1 | 181.4 | 26.2 |
| | *cp* | 5285*a* | 156.4 | 12.9 | 156.2 | 13.1 |
| 1173 Aug. 11, '04 $8^h45^m.5$ | *co* | 5283*a* | 180.1 | 26.0 | 179.5 | 26.1 |
| | *cp* | 5285*a* | 156.9 | 13.9 | 155.4 | 13.4 |
| | *cp′* | | 155.2 | 13.5 | | |
| | *cq* | 5286*a* | 110.5 | −13.4 | 108.0 | −13.3 |
| | *cr* | 5289 | 128.1 | 15.1 | 127.4 | 15.4 |
| | *cs* | 5289 | 125.4 | 16.6 | 124.8 | 16.6 |
| 1182 Aug. 12, '04 $8^h41^m$ | *co* | 5283*a* | 180.0 | 26.5 | 179.7 | 26.2 |
| | *cp* | 5285*a* | 155.1 | 13.5 | 155.8 | 13.7 |
| | *cq* | 5286*a* | 110.3 | −13.4 | 109.8 | −12.7 |
| | *cs* | 5289 | 124.9 | 15.2 | 124.7 | 16.8 |
| | *ct* | 5290 | 164.9 | 11.1 | 162.9 | 11.7 |
| | *cu* | | 162.6 | 11.9 | | |
| 1187 Aug. 13, '04 $9^h17^m$ | *cq* | 5286*a* | 110.7 | −13.3 | 109.9 | −13.0 |
| | | | 109.3 | −13.3 | | |
| | *cp* | 5285*a* | 155.1 | 13.4 | 156.6 | 13.3 |
| | *ct* | 5290 | 165.9 | 11.2 | 165.2 | 11.1 |
| | *cv* | 5291*a* | 59.0 | −18.5 | 58.8 | −18.2 |
| 1207 Aug. 23, '04 $8^h59^m$ | *cw* | 5295*a* | 318.7 | 13.4 | 318.0 | 13.3 |
| 1218 Aug. 24, '04 $8^h16^m.5$ | *cw* | 5295*a* | 318.5 | 13.2 | 318.2 | 13.5 |
| | *cy* | 5296 | 275.9 | −18.2 | 279.7 | −18.6 |
| | *cy′* | 5296 | 273.1 | −18.3 | 272.9 | −18.0 |
| 1234 Aug. 25, '04 $8^h41^m.5$ | *cw* | 5295*a* | 318.5 | 13.5 | 318.5 | 13.6 |
| | *cx* | 5299 | 279.8 | 19.3 | 278.9 | 18.8 |
| | | | 279.3 | 18.8 | | |
| | *cy* | 5296 | 275.8 | −19.8 | 278.9 | −18.3 |
| | *cz* | 5298*a* | 256.3 | −14.4 | 256.1 | −14.1 |
| 1244 Aug. 26, '04 $8^h42^m$ | *cw* | ..... | 318.7 | 13.5 | ..... | ..... |
| | *cx* | 5299 | 280.8 | 19.3 | 280.1 | 19.3 |
| | *cy* | 5296 | 277.0 | −19.6 | 276.4 | −19.4 |
| | | | 276.0 | −19.4 | | |
| | *cz* | 5298*a* | 256.5 | −14.6 | 256.6 | −14.4 |
| 1266 Sept. 9, '04 $10^h35^m$ | *da* | 5307 | 122.2 | −18.2 | 124.6 | −16.5 |

TABLE XVIII—*Continued*

| Plate Number and Date | Letter | Greenwich Number | Spectroheliograph | | Greenwich | |
|---|---|---|---|---|---|---|
| | | | Longitude | Latitude | Longitude | Latitude |
| 1270 Sept. 10, '04 $9^h27^m$ | *da* | 5307 | 121°.3 | −18°.8 | 124°.0 | −16°.5 |
| 1294 Sept. 29, '04 $11^h26^m.5$ | *dc* | 5316*a* | 245.1 | 31.1 | 244.5 | 30.9 |
| | *de* | 5319*a* | 161.2 | −22.1 | 161.0 | −21.5 |
| 1295 Oct. 1, '04 $9^h12^m.5$ | *dc* | 5316 | 244.1 | 31.5 | 243.9 | 31.0 |
| | *dd* | 5316 | 235.6 | 32.5 | 235.9 | 31.7 |
| | *de* | 5319*a* | 162.0<br>160.6 | −22.0<br>−21.5 | 160.7 | −21.2 |
| | *df* | 5318 | 241.0 | −12.5 | 242.6 | −13.7 |
| 1301 Oct. 3, '04 $10^h11^m$ | *dg* | 5320 | 108.3 | 23.1 | 107.5 | 23.6 |
| 1311 Oct. 6, '04 $9^h39^m$ | *dh* | 5326*a* | 133.3 | 16.8 | 132.6 | 16.6 |
| | *di* | 5321 | 129.0 | 19.5 | 128.5 | 19.0 |
| | *dj* | 5321 | 125.5 | 19.5 | 126.1 | 19.7 |
| | *dk* | 5320 | 107.1 | 23.2 | 106.6 | 23.1 |
| | *dl* | 5320*a* | 101.4 | 23.3 | 101.2 | 23.7 |
| 1314 Oct. 7, '04 $9^h33^m$ | *dh* | 5321*a* | 134.4 | 16.3 | 133.3 | 16.6 |
| | *dj* | 5321 | 125.0 | 19.2 | 125.0 | 19.5 |
| | *dk* | 5320 | 107.3 | 23.0 | 107.4 | 23.8 |
| | *dl* | 5320*a* | 100.8<br>100.8<br>101.0 | 24.7<br>23.6<br>22.9 | 101.6 | 24.2 |
| | *dm* | 5323 | 53.4 | 11.8 | 50.1 | 12.5 |
| | *dn* | 5322 | 54.4 | −17.5 | 51.5 | −17.0 |
| | *do* | 5322 | 45.7 | −18.7 | 45.3 | −18.0 |
| 1318 Oct. 15, '04 $9^h22^m$ | *dm′* | 5325*a* | 23.6<br>25.0 | 13.0<br>12.1 | 23.4 | 13.3 |
| | *dn* | 5322*a* | 57.6 | −16.8 | 57.4 | −16.5 |
| | *dp* | 5329*a* | 320.9 | −23.7 | 320.9 | −22.5 |
| 1324 Oct. 17, '04 $9^h46^m$ | *dm′* | 5325 | 23.9 | 13.4 | 23.7 | 13.2 |
| | *dp* | 5329*a* | 320.5 | −23.4 | 319.9 | −23.3 |
| 1329 Oct. 18, '04 $9^h50^m$ | *dp* | 5329*a* | 320.2 | −23.7 | 319.7 | −23.5 |
| | *dq* | 5332*a* | 265.5 | 13.8 | 263.9 | 14.1 |
| 1336 Oct. 26, '04 $9^h41^m$ | *dr* | 5338 | 232.6 | 13.7 | 231.8 | 13.6 |
| | *ds* | 5338 | 228.8 | 14.3 | 228.6 | 13.7 |
| | *dt* | 5339 | 219.6 | 10.8 | 217.5 | 10.9 |
| | *du* | 5336 | 203.0 | 9.4 | 201.9 | 9.9 |
| | *du′* | 5336 | 209.8 | 9.5 | 207.2 | 9.4 |
| 1344 Oct. 27, '04 $9^h55^m$ | *dr* | 5338 | 233.1 | 12.9 | 232.2 | 13.4 |
| | *ds* | 5338 | 228.4 | 14.1 | 228.6 | 14.2 |
| | *dt* | 5339 | 219.2 | 11.0 | 216.3 | 11.2 |
| | *dv* | 5339 | 213.9 | 10.1 | 213.0 | 11.3 |
| 1348 Oct. 28, '04 $9^h44^m$ | *dy* | 5343 | 128.7 | −17.0 | 128.8 | −16.5 |
| | *dr* | 5338 | 230.2<br>233.1 | 12.8<br>13.3 | 232.1 | 13.3 |
| | *dt*<br>*dv* | 5339 | 219.2<br>214.7<br>213.1<br>215.0 | 11.5<br>10.5<br>11.5<br>13.1 | 215.8 | 11.5 |
| | *du* | ..... | 198.9<br>198.7 | 9.9<br>9.2 | ..... | ..... |
| | *dw* | 5336<br>5336 | 204.1<br>202.9 | 9.9<br>9.8 | 204.4<br>202.7 | 9.6<br>9.7 |
| | *dx* | 5342 | 142.7 | 14.8 | 141.9 | 14.7 |

TABLE XVIII—*Continued*

| Plate Number and Date | Letter | Greenwich Number | Spectroheliograph | | Greenwich | |
|---|---|---|---|---|---|---|
| | | | Longitude | Latitude | Longitude | Latitude |
| 1354 | *dr* | 5338 | 232°.6 | 13°.0 | 232°.1 | 12°.8 |
| Oct. 29, '04 | *dt* | | 218.8 | 11.5 | | |
| $9^h50^m$ | | | 212.9 | 11.3 | 216.1 | 11.7 |
| | *dv* | 5339 | 214.2 | 10.7 | | |
| | | | 215.2 | 12.8 | | |
| | *du* | 5336 | 203.9 | 9.3 | 203.8 | 9.9 |
| | | | 202.3 | 9.7 | | |
| | *dw* | 5336 | 210.2 | 10.1 | 208.7 | 9.6 |
| | *dy* | | 129.5 | −17.1 | | |
| | *dz* | | 119.3 | −18.2 | | |
| | *ea* | 5343 | 128.2 | −16.0 | 123.6 | −16.5 |
| | | | 126.3 | −15.9 | | |
| | | | 124.5 | −16.2 | | |
| | *eb* | | 123.4 | −16.0 | | |
| 1362 | *dy* | 5343*a* | 129.9 | −16.9 | 129.0 | −16.8 |
| Nov. 1, '04 | *dz* | 5343 | 120.0 | 17.9 | 119.5 | −17.9 |
| $10^h00^m$ | | | | | | |
| 1366 | *dy* | 5343*a* | 130.1 | −17.4 | 129.5 | −16.8 |
| Nov. 2, '04 | *dz* | 5343 | 122.7 | −17.9 | 119.8 | −17.5 |
| $9^h55^m$ | | | | | | |
| 1370 | *dy* | 5343*a* | 130.8 | −17.7 | 129.7 | −16.9 |
| Nov. 3, '04 | | | 129.5 | −17.4 | | |
| $9^h23^m$ | *ee* | 5351*a* | 60.2 | −16.6 | 60.1 | −16.3 |
| 1380 | *dy* | 5343*a* | 131.0 | −17.7 | 130.2 | −16.8 |
| Nov. 4, '04 | | | 129.8 | −17.5 | | |
| $9^h43^m$ | *ec* | 5351*a* | 60.3 | −16.5 | 60.2 | −16.3 |
| 1391 | *ed* | 5356*a* | 301.2 | −22.5 | 299.6 | −22.0 |
| Nov. 12, '04 | | | | | | |
| $11^h11^m$ | | | | | | |
| 1394 | *ed* | 5356*a* | 301.3 | −22.6 | 300.4 | −22.3 |
| Nov. 14, '04 | | | | | | |
| $10^h09^m$ | | | | | | |
| 1404 | *ef* | 5360*a* | 219.5 | 10.0 | 218.8 | 10.3 |
| Nov. 22, '04 | *eg* | 5366 | 245.9 | 27.6 | 244.6 | 28.2 |
| $9^h43^m$ | | | | | | |
| 1408 | *ef* | 5360*a* | 219.3 | 10.3 | 219.0 | 10.4 |
| Nov. 23, '04 | *eg* | 5366 | 245.6 | 26.9 | 245.7 | 27.2 |
| $11^h36^m$ | *eh* | 5366 | 244.9 | 29.7 | 244.9 | 29.4 |
| 1419 | *el* | 5381*a* | 351.0 | 20.7 | 351.0 | 21.2 |
| Dec. 13, '04 | *em* | 5383 | 333.0 | 16.9 | 335.1 | 16.6 |
| $10^h24^m$ | *en* | 5389*a* | 292.1 | 12.8 | 290.4 | 12.8 |
| | *eo* | | 290.7 | 12.8 | | |
| | *ep* | 5390*a* | 269.7 | 17.8 | 268.8 | 17.3 |
| | *eq* | ..... | 272.1 | 15.5 | ..... | ..... |
| | *er* | ..... | 270.5 | 15.3 | ..... | ..... |
| | *es* | 5399*a* | 239.0 | −16.0 | 238.2 | −16.3 |
| | *et* | 5391 | 265.2 | 23.2 | 264.3 | 23.2 |
| | *eu* | 5396*a* | 240.0 | 28.5 | 240.3 | 28.9 |
| 1423 | *el* | 5381*a* | 351.1 | 20.5 | 350.8 | 20.9 |
| Dec. 14, '04 | *em* | 5383 | 333.0 | 16.8 | 333.2 | 16.3 |
| $10^h41^m.5$ | *en* | 5389*a* | 292.0 | 12.6 | 290.8 | 13.0 |
| | *eo* | | 290.5 | 12.8 | | |
| | *ep* | 5390*a* | 268.8 | 17.7 | 269.9 | 17.0 |
| | *eq* | ..... | 272.5 | 15.4 | ..... | ..... |
| | *es* | 5399*a* | 239.2 | −16.3 | 238.6 | −16.0 |
| | *et* | 5391 | 264.4 | 23.5 | 264.0 | 23.3 |

TABLE XVIII—*Continued*

| Plate Number and Date | Letter | Greenwich Number | Spectroheliograph | | Greenwich | |
|---|---|---|---|---|---|---|
| | | | Longitude | Latitude | Longitude | Latitude |
| 1429 | *em* | 5383 | 332°.7 | 16°.8 | 332°.7 | 17°.4 |
| Dec. 15, '04 | *en* | | 292.3 | 12.2 | | |
| 11h04m | *eo* | 5389*a* | 289.9 | 12.8 | 290.4 | 12.5 |
| | *ev* | | 290.7 | 11.0 | | |
| | *ex* | | 291.4 | 12.5 | | |
| | *ep* | 5390 | 268.7 | 17.9 | 268.1 | 18.0 |
| | *es* | 5399*a* | 240.0 | −16.3 | 238.6 | −16.8 |
| | *et* | 5391 | 263.8 | 24.0 | 262.8 | 23.5 |
| | *eu* | 5396*a* | 239.7 | 28.7 | 239.7 | 29.1 |
| | | | 240.9 | 28.5 | | |
| | *ew* | 5390 | 267.5 | 14.9 | 269.4 | 15.4 |
| 1432 | *en* | ..... | 292.0 | 11.8 | | |
| Dec. 17, '04 | *eo* | ..... | 288.7 | 12.4 | | |
| 11h15m | *ep* | ..... | 268.4 | 17.2 | No photograph | |
| | *ew* | ..... | 266.7 | 14.3 | | |
| | *ey* | ..... | 210.0 | 12.0 | | |
| | *ez* | ..... | 237.3 | 26.7 | | |
| 1438 | *ep* | 5390 | 267.6 | 17.9 | 267.7 | 17.8 |
| Dec. 19, '04 | *ey* | 5400*b* | 209.1 | 12.7 | 208.4 | 12.6 |
| 11h18m5 | *fa* | 5390 | 268.0 | 14.3 | 266.8 | 15.2 |
| 1443 | *fb* | 5402 | 245.1 | −16.3 | 243.4 | −15.7 |
| Dec. 21, '04 | | | | | | |
| 11h41m5 | | | | | | |
| 1450 | *fc* | 5413 | 76.4 | −15.9 | 75.2 | −14.8 |
| Dec. 30, '04 | *fd* | | 75.4 | −14.3 | | |
| 10h42m5 | *fe* | 5413 | 70.6 | −16.0 | 72.7 | −16.1 |
| | *ff* | | 71.5 | −16.7 | | |
| 1453 | *fc* | 5413*a* | 77.0 | −15.5 | 76.4 | −14.9 |
| Dec. 31, '04 | *fd* | | | | | |
| 10h51m | *fe* | 5413*b* | 70.3 | −16.0 | 70.7 | −15.6 |
| | *ff* | | | | | |
| 1467 | *fg* | 5417 | 278.8 | 11.7 | 278.2 | 12.0 |
| Jan. 12, '05 | *fh* | 5420*a* | 263.2 | 17.3 | 263.2 | 17.6 |
| 11h39m5 | *fi* | 5421*a* | 255.0 | 20.7 | 255.0 | 20.8 |
| | *fj* | 5416 | 330.2 | −16.8 | 329.0 | −16.2 |
| | *fk* | 5424*a* | 230.6 | 9.6 | 230.5 | 9.5 |
| | *fl* | 5424*c* | 219.2 | 9.5 | 219.3 | 9.2 |
| | *fm* | 5424*b* | 223.8 | 9.3 | 224.9 | 10.0 |
| | *fn* | 5425 | 242.6 | 19.4 | 241.9 | 19.4 |
| 1470 | *fg* | 5417 | 279.3 | 12.4 | 278.5 | 12.1 |
| Jan. 13, '05 | *fh* | 5420*a* | 263.6 | 17.4 | 263.2 | 17.7 |
| 10h54m | *fi* | 5421*a* | 255.2 | 20.9 | 255.0 | 20.8 |
| | *fk* | 5424*a* | 231.1 | 9.3 | 230.7 | 9.3 |
| | *fl* | 5424*c* | 219.5 | 9.5 | 219.1 | 9.7 |
| | *fm* | 5424*b* | 224.7 | 9.2 | 223.7 | 9.4 |
| | *fn* | 5425 | 244.3 | 20.0 | 243.8 | 19.6 |
| 1476 | *fg* | 5417 | 279.2 | 11.9 | 278.6 | 12.1 |
| Jan. 14, '05 | *fh* | 5420*a* | 263.6 | 17.2 | 263.0 | 17.5 |
| 10h51m | *fi* | 5421*a* | 255.2 | 20.8 | 254.6 | 20.9 |
| | *fk* | 5424*a* | 230.9 | 9.0 | 230.5 | 8.9 |
| | *fl* | 5424*c* | 219.0 | 9.9 | 218.6 | 9.8 |
| | *fm* | 5424*b* | 223.4 | 9.1 | 223.4 | 9.4 |
| | *fn* | 5425 | 245.5 | 20.2 | 244.8 | 20.0 |
| | *fp* | 5424 | 224.8 | 8.3 | 224.9 | 8.1 |
| 1516 | *gf* | 5455 | 196.8 | 19.9 | 196.3 | 19.3 |
| Feb. 17, '05 | *ge* | 5466 | 112.2 | −22.9 | 110.8 | −22.2 |
| 10h51m5 | *gd* | | 111.7 | −22.0 | | |
| | *gc* | 5467*a* | 102.2 | 18.8 | 101.3 | 17.5 |
| | *gb* | 5465 | 167.8 | 10.4 | 167.7 | 10.2 |
| | *ga* | 5452*a* | 200.8 | 20.9 | 200.8 | 21.1 |

TABLE XVIII—*Continued*

| Plate Number and Date | Letter | Greenwich Number | Spectroheliograph | | Greenwich | |
|---|---|---|---|---|---|---|
| | | | Longitude | Latitude | Longitude | Latitude |
| 1519 Feb. 18, '05 $10^h54^m$ | *gh* | 5469*a* | 76°.7 | −15°.6 | 77°.4 | −14°.9 |
| | *gg* | 5466 | 104.7 | −21.7 | 105.8 | −22.4 |
| 1529 Feb. 28, '05 $10^h17^m.5$ | *gs* | 5471*a* | 335.3 | −17.3 | 330.7 | −17.4 |
| | *gr* | | 331.9 | −17.5 | | |
| | *go* | | 329.4 | −17.6 | | |
| | *gn* | | 328.0 | −19.7 | | |
| | *gl* | | 328.0 | −17.2 | | |
| | *gk* | | 333.2 | −18.2 | | |
| | *gq* | 5471 | 326.5 | −16.3 | 324.8 | −16.3 |
| | *gp* | | 325.7 | −15.8 | | |
| | *gm* | | 324.7 | −17.2 | | |
| | *gj* | 5470*b* | 34.6 | 6.7 | 33.8 | 6.5 |
| | *gi* | 5470 | 40.1 | 6.0 | 39.3 | 6.6 |
| 1535 Mar. 1, '05 $11^h02^m.5$ | *gt* | 5471 | 329.6 | −16.8 | ..... | ..... |
| | *go* | | 329.4 | −18.0 | | |
| | *gn* | | 327.9 | −19.7 | | |
| | *gl* | | 327.6 | −17.1 | | |
| | *gp* | 5471 | 325.2 | −16.0 | 324.6 | −16.3 |
| | *gq* | | | | | |
| | *gm* | ..... | 324.5 | −16.9 | | |
| | *gk* | 5471*a* | 333.1 | −17.9 | 330.7 | −17.2 |
| | *gi* | 5470*a* | 39.9 | 5.9 | 39.9 | 6.6 |
| 1543 Mar. 8, '05 $11^h19^m$ | *hf* | 5473 | 277.1 | 13.1 | 279.0 | 11.9 |
| | *he* | | 278.1 | 13.1 | | |
| | *hd* | 5473 | 272.4 | 9.3 | ..... | ..... |
| | *hc* | 5473 | 271.2 | 9.5 | ..... | ..... |
| | *hb* | 5477*a* | 303.0 | 17.5 | 303.0 | 18.1 |
| | *ha* | 5473 | 279.3 | 7.4 | 278.2 | 8.2 |
| | *gz* | 5473 | 272.1 | 7.2 | ..... | ..... |
| | *gy* | 5473*a* | 263.8 | 10.9 | 270.4 | 10.2 |
| | *gx* | | 265.4 | 10.7 | | |
| | *gw* | | 268.1 | 12.2 | | |
| | *gv* | 5473 | 278.5 | 9.7 | 277.9 | 10.6 |
| | *gu* | 5471*c* | 324.2 | −15.6 | 324.1 | −14.8 |
| 1546 Mar. 9, '05 $11^h05^m$ | *hi* | 5473 | 275.1 | 7.7 | ..... | ..... |
| | *hh* | 5473 | 250.6 | 8.8 | ..... | ..... |
| | *hf* | 5473 | 277.7 | 13.4 | ..... | ..... |
| | *he* | 5473 | 278.8 | 13.1 | ..... | ..... |
| | *hd* | 5473 | 272.0 | 9.8 | ..... | ..... |
| | *hc* | | | | | |
| | *hb* | 5477 | 302.9 | 17.4 | ..... | ..... |
| | *gv* | 5473 | 279.0 | 9.5 | 278.8 | 10.0 |
| | *gz* | ..... | 272.6 | 7.4 | ..... | ..... |
| | *hg* | 5473*a* | 267.3 | 10.8 | 269.2 | 10.1 |
| | *gx* | | 266.4 | 10.9 | | |
| | *gw* | | 265.6 | 10.9 | | |
| | | | 268.1 | 12.5 | | |
| | *gy* | ..... | 264.2 | 13.9 | ..... | ..... |
| | | | 263.4 | 12.3 | | |
| 1561 Mar. 30, '05 $9^h43^m$ | *ei* | 5489 | 325.3 | −14.5 | 325.2 | −15.4 |
| | *ej* | | 326.7 | −16.5 | | |
| | *ek* | 5491 | 301.2 | 16.9 | 300.9 | 17.0 |
| 1565 Mar. 31, '05 $9^h48^m$ | *ei* | 5489 | 324.7 | −14.5 | 325.0 | −15.0 |
| | *ej* | | 325.8 | −16.8 | | |
| | *ek* | 5491 | 300.4 | 17.2 | 301.7 | 17.0 |
| 1572 Apr. 1, '05 $11^h23^m$ | *ei* | 5489 | 324.5 | −14.9 | 324.7 | −15.4 |
| | *ej* | | 326.0 | −17.0 | | |

TABLE XVIII—*Continued*

| Plate Number and Date | Letter | Greenwich Number | Spectroheliograph | | Greenwich | |
|---|---|---|---|---|---|---|
| | | | Longitude | Latitude | Longitude | Latitude |
| 1588 | *ho* | 5510 | 112°.1 | 18°.2 | 111°.7 | 18°.5 |
| Apr. 17, '05 | *hn* | 5509 | 68.1 | −14.0 | 67.9 | −13.6 |
| $9^h58^m$ | *hm* | 5505*a* | 87.9 | −13.7 | 87.9 | −13.2 |
| | *hl* | 5502*a* | 107.8 | −21.5 | 108.0 | −20.9 |
| | *hk* | ..... | 110.9 | −22.0 | ..... | ..... |
| | *hj* | 5501*a* | 117.8 | −20.9 | 117.7 | −20.5 |
| 1590 | *hn* | ..... | 69.1 | −13.8 | ..... | ..... |
| Apr. 18, '05 | *hm* | 5505*a* | 87.6 | −13.8 | 87.7 | −13.4 |
| $9^h31^m$ | *hj* | 5501*a* | 117.1 | −21.1 | 117.2 | −20.8 |
| 1601 | *hv* | ..... | 359.8 | −21.5 | ..... | ..... |
| Apr. 28, '05 | *hp* | 5512 | 350.3 | 12.4 | 348.2 | 12.7 |
| $9^h37^m$ | *hq* | 5512 | 349.2 | 13.2 | ..... | ..... |
| | *hr* | 5512 | 347.8 | 13.2 | ..... | ..... |
| | *hu* | 5512 | 347.0 | 13.3 | ..... | ..... |
| | *hs* | 5512 | 345.7 | 12.2 | ..... | ..... |
| | *ht* | 5512 | 343.1 | 14.8 | 342.8 | 14.3 |
| 1604 | *hp* | 5512 | 351.3 | 12.7 | 350.1 | 12.6 |
| Apr. 29, '05 | *hu′* | 5512 | 348.3 | 12.7 | 347.5 | 13.1 |
| $10^h35^m$ | *ht* | 5512 | 343.0 | 14.1 | 342.4 | 14.4 |
| | *hx* | 5516 | 249.7 | −17.7 | 249.1 | −16.5 |
| 1625 | *ia* | 5539 | 347.0 | 13.7 | 346.6 | 12.7 |
| May 26, '05 | *hz* | 5539 | 342.7 | 15.5 | 343.9 | 14.4 |
| $10^h10^m$ | *hy* | 5540 | 293.4 | 4.2 | 292.2 | 4.6 |
| 1626 | *hz* | 5539 | 342.6 | 15.8 | 342.3 | 15.9 |
| May 27, '05 | *hy* | 5540 | 294.8 | 4.8 | 294.1 | 5.1 |
| $10^h03^m$ | *ib* | 5540 | 290.1 | 3.0 | 291.3 | 3.4 |
| 1630 | *ic* | 5540 | 296.3 | 6.6 | 296.1 | 5.6 |
| May 31, '05 | *id* | 5542*a* | 173.9 | 10.1 | 172.0 | 10.3 |
| $10^h36^m$ | *ie* | | 172.8 | 10.0 | | |
| 1634 | *id* | 5542*a* | 174.1 | 10.0 | 173.3 | 10.0 |
| June 1, '05 | *if* | 5542*b* | 168.2 | 9.5 | 168.8 | 10.2 |
| $10^h03^m$ | *ih* | ..... | 168.3 | 11.5 | ..... | ..... |
| | *ig* | 5543 | 161.9 | 13.1 | 161.4 | 13.1 |
| 1640 | | | 174.6 | 10.5 | | |
| June 2, '05 | *id* | 5542*a* | 173.8 | 10.6 | 173.5 | 10.3 |
| $11^h30^m$ | | | 173.3 | 10.7 | | |
| | *if* | 5542*b* | 167.2 | 9.9 | 167.9 | 10.2 |
| | *ig* | 5543 | 161.0 | 13.1 | 161.3 | 13.1 |
| 1644 | | | 174.5 | 10.4 | | |
| June 3, '05 | *id* | 5542*a* | 173.7 | 10.4 | 173.5 | 10.6 |
| $10^h34^m$ | | | 173.0 | 10.4 | | |
| | *ij* | 5542 | 170.1 | 11.1 | 170.0 | 11.3 |
| | | | 167.8 | 10.1 | | |
| | *if* | 5542*b* | 167.2 | 10.0 | 166.8 | 10.3 |
| | | | 166.5 | 9.9 | | |
| | *ig* | 5543 | 160.8 | 13.2 | 161.3 | 13.8 |
| 1648 | *id* | 5542*a* | 173.9 | 10.4 | 173.1 | 10.6 |
| June 5, '05 | *id′* | | 171.6 | 10.9 | | |
| $11^h16^m$ | *if* | 5542*b* | 167.4 | 10.3 | 167.7 | 10.7 |
| | | | 167.2 | 10.3 | | |
| | *ii* | | 162.5 | 13.6 | | |
| | *ik* | 5542 | 162.0 | 11.2 | 162.1 | 11.9 |
| | *ig* | | 160.7 | 12.8 | | |
| | *il* | 5546*a* | 106.8 | − 8.7 | 105.1 | − 5.9 |
| 1656 | *ip* | ..... | 198.4 | 24.7 | ..... | ..... |
| June 6, '05 | *id* | 5542*a* | 174.0 | 10.2 | 172.2 | 10.5 |
| $10^h08^m$ | *if* | 5542*b* | 167.1 | 10.4 | 165.3 | 10.7 |
| | *im* | 5546*a* | 109.6 | − 8.5 | 103.2 | − 7.4 |
| | *in* | | 105.7 | − 9.8 | | |
| | *io* | 5546 | 101.5 | − 6.9 | 98.4 | − 6.6 |

TABLE XVIII—*Continued*

| Plate Number and Date | Letter | Greenwich Number | Spectrohelioograph | | Greenwich | |
|---|---|---|---|---|---|---|
| | | | Longitude | Latitude | Longitude | Latitude |
| 1662 June 8, '05 $9^h30^m$ | *ir* | 5548*a* | 183°.3 | −18°.4 | 182°.5 | −17°.5 |
| | *if* | 5542*b* | 167.5 | 11.0 | 166.9 | 11.4 |
| | *iq* | 5542 | 162.4 | 11.5 | 162.4 | 12.0 |
| | *im* | 5546*a* | 107.0 | − 8.8 | 106.5 | − 8.6 |
| | *is* | 5550*a* | 70.0 | −16.2 | 69.8 | −15.9 |
| 1666 June 13, '05 $3^h24^m$ | *is* | 5550*a* | 71.0 | −16.2 | 70.6 | −15.9 |
| | *iu* | 5552*a* | 55.4 | 19.2 | 56.1 | 19.5 |
| | *it* | 5553*a* | 53.3 | −15.0 | 52.4 | −15.1 |
| 1668 June 14, '05 $10^h09^m$ | *is* | 5550*a* | 70.7 | −16.8 | 70.5 | −15.9 |
| | *iu* | 5552*a* | 55.7 | 19.0 | 55.7 | 19.4 |
| | *it* | 5553*a* | 53.1 | −16.0 | 53.3 | −15.1 |
| 1677 June 15, '05 $3^h05^m$ | *iv* | 5559*a* | 332.7 | −23.7 | 332.1 | −22.2 |
| | *is* | 5550*a* | 71.2 | −16.7 | 70.3 | −16.6 |
| | *iu* | 5552*a* | 55.5 | 18.9 | 56.0 | 18.9 |
| | *it* | 5553*a* | 54.8 | −16.2 | 53.1 | −15.7 |
| 1682 June 16, '05 $10^h04^m$ | *iv* | 5559*a* | 332.0 | −23.5 | 331.9 | −23.2 |
| | *is* | 5550*a* | 71.1 | −16.4 | 70.5 | −15.9 |
| | *iu* | 5552*a* | 55.4 | 18.8 | 55.1 | 19.1 |
| | *it* | 5553*a* | 53.7 | −16.0 | 53.4 | −15.3 |
| 1686 June 21, '05 $11^h00^m$ | *iw* | 5559*a* | 331.5 | −23.3 | 329.4 | −23.1 |
| 1689 June 22, '05 $10^h35^m$ | *ix* | 5564 | 258.8 | 6.5 | 258.3 | 6.2 |
| 1692 June 24, '05 $10^h44^m$ | *iy* | 5564*a* | 264.6 | 5.0 | 263.6 | 5.6 |
| | *iz* | 5564*b* | 255.7 | 5.5 | 255.8 | 5.8 |
| 2208 Apr. 27, '07 $11^h44^m$ | *jd* | 6172*a* | 78.7 | 6.1 | 78.1 | 6.7 |
| | *je* | 6175 | 54.5 | − 8.4 | 54.0 | − 6.9 |
| | *jc* | | 53.0 | − 7.0 | | |
| | *jb* | 6175 | 57.9 | − 6.4 | 57.3 | − 6.1 |
| | *ja* | 6179 | 55.9 | − 3.0 | 55.3 | − 2.5 |
| 2220 May 2, '07 $9^h06^m$ | *jf* | 6180 | 6.3 | −22.5 | 5.0 | −22.5 |
| 2224 May 4, '07 $9^h55^m$ | *jg* | 6181 | 326.2 | − 9.2 | 325.1 | − 8.5 |
| | *jh* | 6181 | 319.8 | − 9.1 | 320.8 | − 8.7 |
| 2226 May 6, '07 $9^h40^m$ | *jg* | 6181 | 328.5 | − 9.0 | 327.0 | − 8.5 |
| | *jm* | | 324.5 | − 9.7 | | |
| | *jh* | 6181 | 320.1 | − 8.4 | 321.1 | − 9.1 |
| | *jj* | 6184 | 250.3 | −10.0 | 249.4 | − 9.7 |
| | *ji* | 6184*a* | 246.1 | −12.8 | 245.0 | −13.0 |
| 2238 May 7, '07 $9^h45^m$ | *jg* | 6181 | 329.8 | − 7.7 | 329.1 | − 7.7 |
| | *jh* | 6181*a* | 319.7 | − 7.9 | 319.3 | − 8.0 |
| | *jk* | 6182 | 305.5 | 16.0 | 305.5 | 16.0 |
| | *jn* | 6184 | 247.0 | −16.8 | 247.5 | −15.4 |
| | *ji* | 6184*a* | 246.1 | −13.8 | 245.6 | −13.1 |
| | *jl* | 6185 | 244.2 | 4.2 | 244.0 | 5.2 |
| 2242 May 8, '07 $9^h23^m$ | *jh* | 6181*a* | 321.0 | − 7.7 | 319.4 | − 7.8 |
| | *jk* | 6182 | 305.1 | 16.0 | 305.0 | 16.3 |
| | *jn* | 6184 | 246.8 | −16.6 | 247.6 | −14.8 |
| | *ji* | 6184*a* | 246.0 | −13.8 | 245.6 | −12.9 |
| | *jp* | | 244.1 | −14.4 | | |
| | *jl* | 6185*a* | 245.3 | 4.0 | 244.7 | 4.9 |
| | *jo* | 6185*b* | 241.1 | 3.5 | 241.6 | 3.9 |

TABLE XVIII—*Continued*

| Plate Number and Date | Letter | Greenwich Number | Spectroheliograph | | Greenwich | |
|---|---|---|---|---|---|---|
| | | | Longitude | Latitude | Longitude | Latitude |
| 2250 May 9, '07 $9^h10^m$ | *jk* | 6182 | 304°.5 | 16°.2 | 304°.5 | 16°.8 |
| | *jn* | 6184 | 247.0 | −16.0 | 247.1 | −15.5 |
| | *ji* | 6184*a* | 246.5 | −13.2 | 246.1 | −12.9 |
| | *jp* | | 245.2 | −15.1 | | |
| | | | 244.2 | −14.1 | | |
| | *jl* | 6185*a* | 247.4 | 3.9 | 246.8 | 4.4 |
| | *jo* | 6185*b* | 241.5 | 3.0 | 241.1 | 3.5 |
| | | | 240.6 | 4.0 | | |
| | | 6185 | 240.3 | 4.7 | 240.3 | 5.4 |
| 2258 May 11, '07 $11^h40^m$ | *jl* | 6185*a* | 249.0 | 4.6 | 248.6 | 4.8 |
| | *ji* | 6184*a* | 246.5 | −13.3 | 245.8 | −12.7 |
| | *jo* | 6185*b* | 241.6 | 3.3 | 241.4 | 3.7 |
| | | | 240.7 | 3.9 | | |
| | *jq* | 6187 | 176.8 | −11.3 | 176.0 | −11.3 |
| 2260 May 13, '07 $10^h26^m$ | *jl* | 6185*a* | 251.4 | 4.8 | 251.2 | 5.4 |
| | *jl′* | | 249.0 | 5.3 | | |
| | *jl″* | 6185 | 247.6 | 4.5 | 247.5 | 5.2 |
| | *ji* | 6184*a* | 247.0 | −12.9 | 246.3 | −11.9 |
| | *jo* | 6185*b* | 241.0 | 3.3 | 241.4 | 4.6 |
| | *jo′* | | 241.4 | 4.8 | | |
| | *jr* | 6187 | 176.5 | −14.3 | 175.6 | −13.7 |
| 2265 May 17, '07 $10^h56^m$ | *js* | 6187 | 175.7 | −11.6 | 175.2 | −11.0 |
| | *jt* | 6189*a* | 82.6 | 7.4 | 81.8 | 8.2 |
| 2270 May 18, '07 $9^h43^m$ | *js* | 6187 | 176.4 | −11.7 | 175.7 | −11.1 |
| | *jt* | 6189*a* | 82.6 | 7.1 | 81.7 | 8.4 |
| 2275 May 20, '07 $9^h57^m$ | *jt* | 6189*a* | 82.3 | 7.1 | 82.2 | 7.9 |
| | *ju* | 6191 | 56.6 | 3.2 | 53.3 | 4.9 |
| | *jv* | 6190 | 46.8 | − 6.1 | 45.9 | − 5.5 |
| 2278 May 21, '07 $9^h43^m$ | *jt* | 6189*a* | 82.3 | 7.2 | 82.4 | 7.7 |
| | *ju* | 6191 | 57.2 | 3.1 | 56.7 | 3.6 |
| | *jv* | 6190 | 47.5 | − 5.9 | 47.1 | − 5.5 |
| 2292 June 5, '07 $10^h14^m$ | *jw* | 6197*a* | 271.3 | −16.3 | 270.7 | −15.9 |
| 2298 June 6, '07 $10^h23^m.5$ | *jw* | 6197*a* | 271.4 | −16.8 | 270.8 | −15.9 |
| 2301 June 8, '07 $9^h52^m$ | *jw* | 6197*a* | 271.5 | −16.0 | 272.6 | −15.8 |
| 2309 June 13, '07 $10^h37^m.5$ | *kc* | 6202 | 109.8 | 11.0 | 109.8 | 11.6 |
| | *kb* | 6202 | 115.6 | 9.8 | 116.0 | 10.7 |
| | *ka* | 6203 | 131.5 | 6.3 | 131.0 | 6.6 |
| | *jz* | 6202 | 117.4 | 10.2 | 116.0 | 10.7 |
| | *jy* | 6204 | 117.0 | −21.9 | 117.5 | −21.2 |
| | *jx* | 6201*a* | 127.3 | −20.3 | 126.9 | −19.6 |
| 2314 June 14, '07 $9^h45^m$ | *kd* | 6205*a* | 69.5 | −17.0 | 69.3 | −16.8 |
| | *kc* | 6202 | 109.9 | 11.3 | 109.8 | 11.4 |
| | | | 109.7 | 12.1 | | |
| | *jz* | 6202 | 117.7 | 10.8 | 116.9 | 11.0 |
| | *jy* | 6204 | 117.2 | −21.1 | 117.0 | −20.9 |
| | *jx* | 6201*a* | 127.4 | −20.0 | 127.1 | −19.7 |

TABLE XVIII—*Continued*

| Plate Number and Date | Letter | Greenwich Number | Spectrohelioograph | | Greenwich | |
|---|---|---|---|---|---|---|
| | | | Longitude | Latitude | Longitude | Latitude |
| 2318 June 15, '07 $9^h42^m$ | *ke* | 6205*c* | 60°.7 | −12°.0 | 61°.2 | −11°.8 |
| | *kd* | 6205*a* | 68.9 | −17.2 | 69.0 | −16.8 |
| | *kc* | 6202 | 109.8 | 11.4 | 109.1 | 11.7 |
| | *jz* | 6202 | 118.2 | 11.3 | 117.6 | 11.3 |
| | *jy* | 6204 | 117.1 | −21.0 | 116.7 | −20.8 |
| | *jx* | 6201*a* | 127.4 | −20.0 | 127.0 | −19.6 |
| 2324 June 17, '07 $9^h14^m$ | *kg* | 6205*b* | 67.5<br>65.9<br>63.2 | −15.2<br>−12.2<br>−14.8 | 66.1 | −14.3 |
| | *kd* | 6205*a* | 68.6 | −17.1 | 68.7 | −17.0 |
| | *kf* | ..... | 69.9<br>68.7 | −19.5<br>−19.0 | ..... | ..... |
| | *ke* | 6205*c* | 60.5 | −11.6 | 60.7 | −11.7 |
| | *jy* | 6204 | 116.5 | −21.7 | 116.7 | −21.4 |
| | *jx* | 6201*a* | 127.6 | −19.3 | 127.1 | −19.6 |
| 2329 June 18, '07 $10^h02^m$ | *kh* | 6202 | 109.9 | 11.4 | 109.4 | 11.6 |
| | *kg* | 6205<br>6205 | 64.6<br>67.2 | −13.6<br>−15.8 | 63.1<br>65.1 | −13.2<br>−16.7 |
| | *kf* | ..... | 70.8 | −19.5 | ..... | ..... |
| | *ke* | 6205*c* | 60.2 | −11.8 | 60.5 | −10.8 |
| | *kd* | 6205*ab* | 68.9 | −17.1 | 67.8 | −15.3 |
| | *jz* | 6202 | 119.1 | 11.9 | 118.9 | 12.1 |
| | *jy* | 6204 | 116.5 | −22.1 | 115.8 | −21.5 |
| 2333 June 19, '07 $11^h52^m$ | *kg* | 6205*b* | 71.1<br>65.0<br>66.1<br>67.2 | −13.9<br>−13.2<br>−13.0<br>−15.2 | 66.2 | −13.8 |
| | *kf* | 6205 | 71.9 | −19.6 | 71.1 | −18.5 |
| | *ke* | 6205*c* | 60.5 | −11.3 | 60.3 | −10.9 |
| | *kd* | 6205*a* | 68.8 | −17.0 | 68.6 | −16.5 |
| | *jz* | 6202<br>6202 | 119.9<br>117.3 | 12.0<br>11.5 | 119.4<br>116.8 | 12.3<br>11.7 |
| 2335 June 20, '07 $9^h24^m$ | *kg* | 6205<br>6205<br>6205*b* | 71.6<br>61.7<br>67.0 | −13.4<br>−12.5<br>−14.8 | 71.5<br>61.1<br>66.0 | −13.2<br>−12.1<br>−13.7 |
| | *kf* | 6205 | 71.7 | −19.3 | 71.8 | −18.1 |
| | *ke* | 6205*c* | 59.8 | −11.2 | 59.6 | −10.4 |
| | *kd* | 6205*a* | 68.8 | −16.8 | 68.6 | −16.6 |
| 2339 June 22, '07 $9^h18^m$ | *kc* | 6205*c* | 58.8<br>60.8<br>61.9<br>59.6<br>60.8<br>62.8 | −10.6<br>−11.3<br>−11.5<br>−12.0<br>−12.8<br>−12.4 | 61.1 | −11.3 |
| | *kg* | 6205*b* | 66.8 | −15.7 | 66.2 | −13.7 |
| | *kd* | 6205*a* | 68.7 | −17.4 | 68.0 | −16.6 |
| 2352 June 26, '07 $11^h50^m$ | *ki* | 6209 | 271.5 | 3.4 | 270.9 | 3.8 |
| 2353 June 27, '07 $9^h27^m$ | *ki* | 6209 | 271.4 | 3.7 | 270.7 | 3.8 |
| 2358 June 28, '07 $10^h29^m$ | *ki* | 6209 | 272.6 | 4.0 | 271.5 | 5.2 |
| 2361 June 29, '07 $9^h39^m$ | *ki* | 6209 | 273.2 | 4.8 | 272.9 | 4.6 |

TABLE XVIII—*Continued*

| Plate Number and Date | Letter | Greenwich Number | Spectroheliograph | | Greenwich | |
|---|---|---|---|---|---|---|
| | | | Longitude | Latitude | Longitude | Latitude |
| 2369 | *kk* | 6211 | 190°9 | 3°0 | 189°2 | 2°9 |
| July 2, '07 | *kj* | 6210*a* | 288.3 | 11.9 | 287.6 | 12.1 |
| $9^h17^m$ | | | | | | |
| 2375 | *km* | 6212 | 182.2 | − 7.9 | 180.7 | − 6.8 |
| July 3, '07 | | 6211 | 187.5 | 3.5 | 187.7 | 4.4 |
| $2^h56^m$ | | | 188.9 | 3.4 | | |
| | *kl* | 6211 | 187.0 | 5.8 | 188.0 | 6.0 |
| | | | 189.3 | 4.5 | | |
| | *kk* | 6211 | 193.0 | 3.0 | 191.0 | 4.2 |
| 2401 | *kp* | 6223 | 248.2 | 7.0 | 246.5 | 7.9 |
| July 26, '07 | *ko* | 6223 | 253.7 | 7.2 | 251.9 | 6.7 |
| $11^h28^m$ | *kn* | 6220*c* | 303.9 | − 7.9 | 301.9 | − 7.8 |
| 2403 | *kp* | 6223 | 248.7 | 7.3 | 248.8 | 7.5 |
| July 27, '07 | *ko* | 6223 | 254.1 | 7.1 | 253.3 | 6.7 |
| $9^h15^m$ | | | 254.9 | 6.8 | | |
| | *kn* | 6220*c* | 304.6 | − 8.1 | 303.5 | − 7.5 |
| 2406 | *kt* | 6226*a* | 194.9 | − 7.5 | 194.4 | − 7.9 |
| July 29, '07 | *ks* | 6225*a* | 201.9 | 9.6 | 201.2 | 9.5 |
| $9^h45^m$ | *kr* | 6223 | 257.7 | −13.2 | 256.1 | −13.1 |
| | *kr′* | ..... | 256.5 | −13.9 | ..... | ..... |
| | *kq* | 6223 | 258.7 | −13.2 | 258.1 | −13.3 |
| | *ko* | 6223 | 255.5 | 6.1 | 254.8 | 6.6 |
| | *kn* | 6220*c* | 305.0 | − 8.2 | 304.1 | − 7.5 |
| 2411 | *ku* | 6227*a* | 185.4 | − 9.2 | 185.0 | − 9.2 |
| July 30, '07 | *kt* | 6226*a* | 196.4 | − 8.4 | 196.1 | − 8.5 |
| $9^h06^m$ | *ks* | 6225*a* | 202.2 | 9.7 | 201.7 | 9.6 |
| | *kq* | 6223 | 259.8 | −13.7 | 259.2 | −13.1 |
| | *ko* | 6223 | 256.9 | 5.9 | 256.7 | 7.0 |
| | *kn* | 6220*c* | 305.9 | − 8.1 | 304.7 | − 7.8 |
| 2417 | *ku* | 6227*a* | 185.0 | − 9.9 | 184.6 | − 9.3 |
| July 31, '07 | *kt* | 6226*a* | 197.3 | − 9.0 | 196.6 | − 8.5 |
| $11^h46^m$ | *ks* | 6225*a* | 202.0 | 9.4 | 201.3 | 9.8 |
| | *ko* | 6223 | 258.1 | 6.7 | 257.4 | 7.3 |
| 2420 | *kv* | 6226 | 193.8 | − 8.2 | 193.4 | − 7.9 |
| Aug. 1, '07 | *ku* | 6227*a* | 184.5 | − 9.9 | 184.3 | − 9.6 |
| $11^h42^m$ | *kt* | 6226*a* | 198.5 | − 8.7 | 197.4 | − 8.5 |
| | *ks* | 6225*a* | 201.7 | 9.4 | 201.4 | 9.6 |
| | *ko* | 6223 | 259.0 | 6.4 | 257.8 | 7.5 |
| 2423 | *ku* | 6227*a* | 184.3 | − 9.8 | 183.8 | − 9.7 |
| Aug. 2, '07 | *kt* | 6226*a* | 199.5 | − 8.5 | 198.9 | − 8.3 |
| $10^h04^m$ | *ks* | 6225*a* | 201.5 | 8.1 | 201.2 | 9.7 |
| | *ko* | 6223 | 260.6 | 6.4 | 258.7 | 7.1 |
| 2427 | *kx* | 6229*a* | 166.9 | − 9.9 | 166.5 | − 9.6 |
| Aug. 3, '07 | *kw* | 6223 | 252.3 | 8.5 | 250.7 | 8.8 |
| $9^h40^m$ | *ku* | 6227*a* | 183.7 | −10.1 | 183.9 | − 9.7 |
| | *kt* | 6226*a* | 200.7 | − 9.0 | 200.0 | − 8.6 |
| | *ks* | 6225*a* | 201.3 | 9.1 | 201.1 | 9.7 |
| 2434 | *lb* | 6233*a* | 58.1 | −19.4 | 57.8 | −19.8 |
| Aug. 9, '07 | *la* | 6232*a* | 89.9 | −14.4 | 89.3 | −14.1 |
| $9^h08^m$ | | | 142.2 | 6.1 | | |
| | *kz* | 6231 | 142.7 | 6.8 | 143.3 | 7.5 |
| | | | 142.7 | 8.7 | | |
| | | | 140.9 | 7.0 | | |
| | *ky* | 6231*a* | 147.2 | 8.3 | 146.4 | 8.6 |
| 2451 | *lb* | 6233*a* | 58.2 | −19.3 | 57.9 | −19.2 |
| Aug. 10, '07 | *la* | 6232*a* | 90.2 | −14.3 | 89.5 | −13.8 |
| $11^h54^m$ | | | 142.9 | 6.6 | | |
| | *kz* | 6231*b* | 141.8 | 8.1 | 141.6 | 7.4 |
| | | | 141.7 | 8.1 | | |
| | | | 142.2 | 5.5 | | |

TABLE XVIII—*Continued*

| Plate Number and Date | Letter | Greenwich Number | Spectrohelioograph | | Greenwich | |
|---|---|---|---|---|---|---|
| | | | Longitude | Latitude | Longitude | Latitude |
| 2452 | *lc* | 6234*a* | 27°.5 | 15°.1 | 26°.5 | 14°.9 |
| Aug. 12, '07 | *lb* | 6233*a* | 57.3 | −19.7 | 57.0 | −19.3 |
| $10^h00^m$ | | | | | | |
| 2460 | *ld* | 6235*a* | 94.6 | 17.8 | 94.0 | 19.0 |
| Aug. 14, '07 | *lc* | 6234*a* | 27.5 | 15.0 | 26.8 | 15.3 |
| $9^h50^m$ | *lb* | 6233*a* | 57.3 | −19.7 | 57.4 | −19.1 |
| 2465 | *lh* | 6236*b* | 326.1 | −27.2 | 325.5 | −27.0 |
| Aug. 16, '07 | *lg* | 6236 | 333.2 | −21.8 | 333.0 | −21.1 |
| $10^h53^m$ | *lf* | 6236*a* | 339.0 | −23.5 | 338.5 | −23.0 |
| | *lc* | 6234 | 27.7 | 14.9 | 27.2 | 15.8 |
| | *lb* | 6233*a* | 56.5 | −20.0 | 55.9 | −19.2 |
| 2468 | *li* | 6238*a* | 309.8 | − 8.2 | 309.9 | − 8.0 |
| Aug. 17, '07 | *lh* | 6236*b* | 325.2 | −26.9 | 325.5 | −26.2 |
| $11^h49^m$ | | 6236 | 327.6 | −25.7 | 328.3 | −24.5 |
| | *lg* | 6236 | 333.1 | −21.5 | 333.5 | −20.6 |
| | | 6236 | 336.3 | −21.4 | 335.2 | −21.9 |
| | *lf* | 6236*a* | 338.6 | −23.5 | 338.7 | −22.7 |
| | *lc* | 6234 | 27.7 | 15.0 | 26.9 | 15.4 |
| | *lb* | 6233*a* | 56.2 | −20.0 | 54.7 | −19.0 |
| 2470 | *lj* | 6239*a* | 264.8 | −13.7 | 264.7 | −13.4 |
| Aug. 22, '07 | *li* | 6238*a* | 311.0 | − 8.1 | 310.6 | − 7.5 |
| $10^h11^m$ | *lh* | 6236 | 325.1 | −25.8 | 324.8 | −24.7 |
| | *lg* | 6236 | 330.7 | −24.0 | 330.6 | −23.2 |
| | | | 335.2 | −24.8 | | |
| | | | 336.6 | −24.0 | | |
| | *lf* | 6236*a* | 338.0 | −21.0 | 336.1 | −23.4 |
| | | | 339.7 | −21.5 | | |
| 2477 | *lk* | 6240 | 263.4 | − 9.2 | 265.8 | − 8.1 |
| Aug. 23, '07 | *lj* | 6239*a* | 265.1 | −13.7 | 264.5 | −13.7 |
| $9^h33^m$ | *li* | 6238*a* | 311.3 | − 8.5 | 311.1 | − 7.7 |
| | *lh* | 6236 | 326.0 | −26.0 | 324.1 | −24.7 |
| | *lg* | 6236 | 330.7 | −24.4 | 332.0 | −22.8 |
| | | | 337.6 | −24.4 | | |
| | *lf* | 6236*a* | 336.0 | −22.2 | 336.3 | −23.7 |
| | | | 333.7 | −22.8 | | |
| 2480 | *lm* | 6239 | 231.7 | −13.2 | 231.5 | −13.0 |
| Aug. 24, '07 | *ll* | ..... | 241.6 | −12.7 | ..... | ..... |
| $9^h07^m$ | *lj* | 6239*a* | 264.8 | −13.8 | 264.5 | −13.1 |
| | *li* | 6238*a* | 311.9 | − 8.6 | 310.9 | − 7.9 |
| | *lg* | 6236 | 330.7 | −24.2 | 329.2 | −23.4 |
| 2501 | *lt* | 6253*a* | 5.3 | 9.0 | 4.9 | 9.1 |
| Sept. 12, '07 | | 6252*d* | 24.3 | − 4.2 | 24.1 | − 6.6 |
| $10^h48^m$ | *ls* | 6252*c* | 25.4 | − 4.0 | 24.9 | − 4.2 |
| | | 6252 | 26.4 | − 4.0 | 26.5 | − 5.7 |
| | *lr* | 6252*b* | 29.8 | − 6.0 | 28.8 | − 6.0 |
| | *lq* | 6247*a* | 38.2 | − 7.9 | 37.3 | − 7.4 |
| | *lp* | 6251*b* | 84.8 | 25.8 | 84.0 | 26.2 |
| 2505 | *lv* | 6256*a* | 308.6 | 7.0 | 308.4 | 6.9 |
| Sept. 13, '07 | *lu* | 6255*a* | 326.8 | −23.8 | 327.1 | −23.5 |
| $10^h35^m$ | *lt* | 6253*a* | 5.3 | 9.0 | 5.2 | 9.0 |
| | | 6252*c* | 24.5 | − 3.9 | 23.9 | − 3.7 |
| | *ls* | 6252*d* | 22.7 | − 6.0 | 23.4 | − 6.5 |
| | | ..... | 24.3 | − 7.9 | ..... | ..... |
| | *lr* | 6252*b* | 30.4 | − 5.9 | 29.8 | − 5.5 |
| | *lq* | 6247*a* | 38.0 | − 8.0 | 37.4 | − 7.4 |
| 2509 | *lv* | 6256*a* | 309.0 | 6.5 | 308.1 | 6.6 |
| Sept. 14, '07 | *lu* | 6255*a* | 326.6 | −23.8 | 326.2 | −23.7 |
| $9^h46^m$ | *lt* | 6253*a* | 6.3 | 9.2 | 5.7 | 9.3 |
| | | 6252 | 25.3 | − 4.2 | 26.2 | − 4.3 |
| | *ls* | 6252*c* | 23.3 | − 5.2 | 24.2 | − 3.5 |
| | | 6252*d* | 23.3 | − 6.9 | 22.6 | − 6.0 |
| | *lr* | 6252*b* | 31.3 | − 6.3 | 30.0 | − 5.6 |
| | *lq* | 6247*a* | 38.3 | − 8.2 | 37.1 | − 7.5 |

TABLE XVIII—*Continued*

| Plate Number and Date | Letter | Greenwich Number | Spectroheliograph | | Greenwich | |
|---|---|---|---|---|---|---|
| | | | Longitude | Latitude | Longitude | Latitude |
| 2538*a* | *lw* | ..... | 46°.8 | −10°.0 | ..... | ..... |
| Oct. 8, '07 | *lx* | 6273*a* | 36.9 | − 6.0 | 36°.7 | − 6°.2 |
| 9h32m | *lz* | 6276 | 356.5 | −23.8 | 353.1 | −23.7 |
| 2542 | *lw* | 6275*a* | 48.4 | − 9.3 | 47.6 | − 9.5 |
| Oct. 9, '07 | *lx* | 6273*a* | 37.2 | − 6.0 | 37.3 | − 5.9 |
| 10h23m | *ly* | 6275*b* | 42.3 | − 9.2 | 42.9 | − 9.1 |
| | *lz* | 6276 | 358.6 | −24.0 | 357.5 | −23.2 |
| | *ma* | 6276 | 356.2 | −24.0 | 355.6 | −23.5 |
| | *mb* | 6276 | 352.5 | −22.7 | 352.6 | −22.4 |
| 2551 | *mc* | 6279*a* | 315.1 | − 6.5 | 315.2 | − 6.0 |
| Oct. 17, '07 | *md* | 6280*a* | 311.3 | 7.2 | 310.6 | 7.7 |
| 11h05m | *mf* | 6282*b* | 254.3 | 5.9 | 254.1 | 6.1 |
| | *mg* | 6282*c* | 252.4 | 5.7 | 252.0 | 5.4 |
| | *mh* | 6283*a* | 238.6 | 8.4 | 237.9 | 8.2 |
| | *mi* | | 237.3 | 7.9 | | |
| | *mj* | 6283 | 237.6 | 10.6 | 236.9 | 10.4 |
| | *mk* | 6283*b* | 232.2 | 8.2 | 232.4 | 8.1 |
| | *ml* | 6284*a* | 228.8 | 8.3 | 228.1 | 8.0 |
| | *mm* | 6285*a* | 220.8 | 10.8 | 220.8 | 10.7 |
| 2554 | *mc* | 6279*a* | 317.1 | − 6.6 | 315.9 | − 6.2 |
| Oct. 18, '07 | *md* | 6280*a* | 311.8 | 7.6 | 311.4 | 7.9 |
| 10h08m | *mf* | 6282*b* | 254.9 | 6.1 | 254.1 | 6.2 |
| | *mg* | 6282*d* | 252.6 | 5.4 | 252.1 | 5.0 |
| | *mh* | 6283*a* | 238.3 | 8.2 | 237.8 | 8.8 |
| | *mi* | | | | | |
| | *mj* | 6283 | 237.6 | 10.4 | 235.0 | 9.1 |
| | *mk* | 6283*b* | 232.5 | 8.3 | 232.0 | 8.4 |
| | *ml* | 6284*a* | 228.8 | 8.2 | 228.3 | 8.1 |
| | *mm* | 6285*a* | 220.9 | 10.6 | 220.9 | 10.6 |
| 2557 | *mg* | 6282*d* | 254.4 | 4.1 | 253.0 | 4.2 |
| Oct. 21, '07 | *mf* | 6282*b* | 255.9 | 5.1 | 254.5 | 5.7 |
| 10h33m2 | *mo* | 6283 | 241.9 | 9.1 | 240.2 | 10.2 |
| | *mh* | 6283*a* | 239.0 | 8.1 | 237.7 | 8.4 |
| | *mk* | 6284*a* | 229.8 | 7.3 | 227.7 | 7.8 |
| | *ml* | | 228.3 | 7.5 | | |
| | *mn* | 6285*b* | 222.5 | 9.1 | 221.5 | 9.0 |
| | *mm* | 6285*a* | 221.8 | 10.7 | 220.8 | 10.7 |
| | *mp* | 6285*c* | 219.7 | 10.1 | 218.2 | 10.3 |
| 2560 | *mf* | 6282*b* | 255.8 | 6.0 | 254.4 | 5.6 |
| Oct. 22, '07 | *mg* | 6282*d* | 254.4 | 5.2 | 253.0 | 4.0 |
| 10h32m | *mh* | 6283*a* | 254.5 | 4.0 | 237.6 | 8.6 |
| | *mk* | 6284*b* | 238.9 | 8.7 | 228.7 | 7.5 |
| | *ml* | 6284*c* | 230.1 | 7.7 | 227.3 | 8.1 |
| | *mm* | 6285*a* | 228.3 | 8.0 | 220.9 | 10.9 |
| | *mo* | 6283 | 221.9 | 11.2 | 242.3 | 8.9 |
| | *ms* | ..... | 243.6 | 9.0 | ..... | ..... |
| | | | 236.5 | 10.1 | | |
| 2564 | *mf* | 6282*b* | 256.4 | 4.7 | 255.4 | 6.2 |
| Oct. 23, '07 | *mg* | 6282*d* | 254.8 | 4.8 | 254.5 | 3.9 |
| 11h00m | *mh* | 6283*a* | 239.2 | 8.1 | 238.7 | 9.2 |
| | *ms* | 6283 | 237.0 | 9.8 | 236.6 | 10.1 |
| | *mk* | 6284*b* | 230.5 | 7.3 | 229.9 | 7.8 |
| | *ml* | 6284*c* | 228.5 | 7.7 | 228.4 | 8.3 |
| | *mm* | 6285*a* | 220.8 | 11.0 | 221.8 | 11.3 |
| | *mr* | 6289*a* | 143.1 | −15.9 | 142.3 | −16.3 |
| 2568 | *mr* | 6289*a* | 143.6 | −16.1 | 143.1 | −17.0 |
| Oct. 25, '07 | | | | | | |
| 9h51m | | | | | | |
| 2615 | *mu* | 6323*a* | 223.1 | −16.0 | 220.8 | −15.6 |
| Dec. 19, '07 | *mv* | 6323*b* | 213.8 | −15.3 | 212.6 | −15.6 |
| 11h23m | *mw* | 6325 | 184.4 | −18.8 | 182.6 | −18.0 |
| | *mx* | 6324*a* | 143.6 | − 5.1 | 143.5 | − 5.0 |

TABLE XVIII—*Continued*

| Plate Number and Date | Letter | Greenwich Number | Spectrohelioograph | | Greenwich | |
|---|---|---|---|---|---|---|
| | | | Longitude | Latitude | Longitude | Latitude |
| 2620 Dec. 20, '07 $11^h36^m$ | *mv* | 6323*b* | 214°6 | −15°8 | 213°3 | −15°4 |
| | *mw* | 6325 | 186.2 | −18.8 | 184.9 | −18.7 |
| | *mx* | 6324*a* | 143.7 | − 5.4 | 143.6 | − 5.0 |
| 2682 Apr. 20, '08 $10^h13^m$ | *na* | 6406*a* | 307.4 | − 4.0 | 306.6 | − 3.0 |
| | *nb* | 6407*a* | 294.6 | − 8.7 | 293.8 | − 8.1 |
| 2685 Apr. 21, '08 $10^h10^m$ | *na* | 6406*a* | 307.6 | − 3.3 | 306.9 | − 2.8 |
| | *nb* | 6407*a* | 294.9 | − 8.0 | 294.3 | − 7.5 |
| 2689 Apr. 22, '08 $2^h52^m$ | *na* | 6406*a* | 308.2 | − 2.2 | 306.9 | − 2.7 |
| | *nb* | 6407*a* | 295.1 | − 7.3 | 294.5 | − 7.8 |
| 2702 May 20, '08 $10^h04^m$ | *nc* | 6436*a* | 332.4 | 11.3 | 332.0 | 11.2 |
| 2705 May 21, '08 $10^h28^m$ | *nc* | 6436*a* | 332.1 | 11.4 | 331.9 | 11.5 |
| 2709 May 22, '08 $10^h42^m$ | *nc* | 6436*a* | 332.4 | 12.0 | 331.9 | 11.5 |
| | *nc′* | 6438 | 322.1 | −21.5 | 321.0 | 21.7 |
| 2714 June 1, '08 $9^h18^m$ | *nd* | 6440*a* | 159.1 | −15.0 | 158.6 | −14.7 |
| | *ne* | 6441*a* | 144.7 | − 3.2 | 144.0 | − 2.8 |
| | *nf* | 6446*a* | 104.4 | −11.8 | 103.9 | −11.2 |
| | *nh* | 6445*a* | 106.6 | 11.5 | 105.4 | 11.5 |
| | *ni* | | 105.5 | 11.0 | | |
| | *nj* | 6447 | 100.5 | 11.4 | 100.6 | 11.0 |
| | *nd′* | 6449*a* | 186.7 | − 9.1 | 186.2 | − 9.1 |
| | *ne′* | 6449*b* | 183.8 | − 9.6 | 183.6 | − 9.3 |
| | *nk* | 6450 | 144.9 | 10.1 | 144.5 | 10.4 |
| 2719 June 2, '08 $9^h44^m$ | *nd* | 6440*a* | 158.8 | −14.9 | 158.4 | −14.6 |
| | *ne* | 6441*a* | 144.9 | − 3.0 | 144.1 | − 3.2 |
| | *nf* | 6446*a* | 105.4 | −11.2 | 105.1 | −11.1 |
| | *ng* | 6448*a* 6448*b* | 94.4 | −11.3 | 96.9 93.8 | −11.8 −10.6 |
| | *nh* | 6445*a* | 107.4 | 11.0 | 105.9 | 11.1 |
| | *ni* | | 106.3 | 11.1 | | |
| | | | 104.7 | 10.9 | | |
| | *nj* | 6447 | 100.6 | 12.0 | 100.5 | 10.8 |
| | *nk* | 6450*a* | 146.1 | 10.0 | 145.7 | 9.8 |
| 2725 June 4, '08 $9^h29^m$ | *ne* | 6441*a* | 146.0 | − 2.9 | 145.1 | − 2.9 |
| | *nd* | 6440*a* | 158.8 | −14.6 | 158.0 | −14.2 |
| | *ng* | 6448*b* | 93.8 | −10.7 | 94.1 | −11.6 |
| | | | 93.2 | −11.5 | | |
| | | | 94.1 | −12.9 | | |
| | *nh* | 6445*a* | 108.5 | 10.3 | 107.4 | 10.7 |
| | *ni* | 6445 | 106.7 | 10.2 | 104.8 | 10.7 |
| | | | 105.9 | 10.0 | | |
| | | | 105.0 | 10.3 | | |
| | *nj* | 6447 | 100.8 | 12.2 | 100.7 | 12.0 |
| | *nl* | 6448*a* | 100.0 | −11.2 | 99.1 | −11.6 |
| 2730 June 5, '08 $10^h03^m$ | *ne* | 6441*a* | 147.0 | − 3.0 | 145.4 | − 2.8 |
| | *nf* | 6446*a* | 107.2 | −10.9 | 107.0 | −10.6 |
| | *ng* | 6448*b* | 93.5 | −11.1 | 94.0 | −11.5 |
| | | | 94.0 | −12.2 | | |
| | *nh* | 6445*a* | 109.6 | 10.1 | 108.8 | 10.2 |
| | *ni* | 6445 | 107.4 | 10.1 | 106.3 | 10.2 |
| | *nj* | 6447 | 101.2 | 12.1 | 100.6 | 12.3 |
| | *nl* | 6448 | 102.0 | −10.9 | 101.2 | −10.6 |
| | | 6448*a* | 99.7 | −11.5 | 99.2 | −11.6 |
| | *nm* | 6451 | 102.8 | −17.0 | 101.8 | −16.9 |

TABLE XVIII—*Continued*

| Plate Number and Date | Letter | Greenwich Number | Spectroheliograph | | Greenwich | |
|---|---|---|---|---|---|---|
| | | | Longitude | Latitude | Longitude | Latitude |
| 2733 June 6, '08 $10^h10^m$ | *nf* | 6446*a* | {108°.8 107.0} | {−10°.4 −10.9} | 107°.2 | −10°.6 |
| | *ng* | {6448*c* 6448*d* | 93.8 93.2 | −12.2 −11.3 | 94.5 93.7 | −12.3 −10.7 |
| | *nh* | 6445*a* | 110.4 | 10.2 | 109.5 | 10.5 |
| | *nj* | 6447 | 101.2 | 12.4 | 100.7 | 12.7 |
| | *nl* | 6448 | 102.8 | −10.7 | 101.7 | −10.7 |
| | *nm* | 6451 | 104.2 | −17.0 | 102.9 | −16.9 |
| | *nn* | 6451 | 101.7 | −17.1 | 99.1 | −17.7 |
| 2748 June 15, '08 $11^h44^m1$ | *no* | 6453*a* | 333.7 | 10.0 | 333.3 | 10.2 |
| 2753 June 16, '08 $10^h12^m2$ | *no* | 6453*a* | 333.7 | 10.2 | 333.2 | 10.5 |
| 2768 June 24, '08 $9^h55^m3$ | *np* | 6464*a* | 154.1 | − 2.5 | 153.8 | − 2.7 |
| | *nr* | ..... | 226.8 | −19.3 | ..... | ..... |
| 2774 June 25, '08 $9^h56^m9$ | *np* | 6464*a* | 154.3 | − 2.9 | 153.6 | − 2.4 |
| | *nr* | 6463 | 227.6 | −18.8 | 225.9 | −18.8 |
| 2781 June 26, '08 $9^h26^m0$ | *np* | 6464*a* | 153.7 | − 2.6 | 153.9 | − 2.9 |
| | *nq* | 6465*a* | 131.4 | −14.8 | 131.4 | −15.4 |
| 2789 June 27, '08 $8^h57^m7$ | *np* | 6464*a* | 154.4 | − 3.0 | 153.7 | − 2.9 |
| | *nq* | 6465*a* | 131.3 | −15.2 | 131.1 | −15.0 |
| 2805 July 8, '08 $9^h21^m$ | *ns* | 6472*a* | 354.4 | 10.1 | 353.6 | 9.7 |
| 2809 July 9, '08 $9^h23^m8$ | *ns* | 6472*a* | 353.4 | 10.2 | 354.8 | 10.3 |
| 2813 July 10, '08 $2^h18^m0$ | *ns* | 6472*a* | 354.7 | 10.0 | 355.0 | 10.6 |
| 2820 July 11, '08 $10^h45^m6$ | *ns* | 6472*a* | 355.3 | 11.2 | 254.5 | 10.6 |
| 2837 July 15, '08 $10^h33^m6$ | *nt* | 6480*a* | 320.0 | −15.1 | 318.6 | −14.7 |
| | *nu* | 6478 | 234.5 | −20.2 | 233.4 | −20.6 |
| 2840 July 21, '08 $10^h16^m2$ | *nu* | 6478*a* | 237.1 | −20.7 | 236.4 | −20.6 |
| | *nu′* | 6478 | 234.6 | −18.2 | 234.8 | −18.3 |
| | *nv′* | 6481 | 226.1 | −20.0 | 226.0 | −19.2 |
| | *nw* | 6482 | 251.9 | − 1.9 | 253.0 | − 2.3 |
| | *nx* | 6482 | 250.6 | − 3.1 | 250.5 | − 2.7 |
| | *ny* | 6482 | 247.9 | − 3.1 | 248.6 | − 2.3 |
| | *nz* | 6482 | 248.8 | − 0.9 | 248.8 | − 0.9 |
| | *oa* | ..... | 249.5 | 13.0 | ..... | ..... |
| | *ob* | ..... | 249.0 | 14.7 | ..... | ..... |
| | *oc* | ..... | 243.3 | 13.2 | ..... | ..... |
| | *od* | 6486 | 243.3 | 14.9 | 243.5 | 15.4 |
| | *oa′* | ..... | 247.4 | 13.1 | ..... | ..... |

TABLE XVIII—*Continued*

| Plate Number and Date | Letter | Greenwich Number | Spectroheliograph | | Greenwich | |
|---|---|---|---|---|---|---|
| | | | Longitude | Latitude | Longitude | Latitude |
| 2845 July 22, '08 $9^h27^m4$ | *nu* | 6478*a* | 236°.5 | −20°.5 | 237°.0 | −20°.0 |
| | *nv'* | 6481 | 225.9 | −20.0 | 226.4 | −19.7 |
| | *nw* | 6482 | 252.7 | − 2.0 | 250.1 | − 4.0 |
| | *nx* | | 250.4 | − 3.0 | | |
| | *ny* | ..... | 247.4 | − 2.9 | ..... | ..... |
| | *nz* | 6482 | 248.5 | − 0.8 | 249.5 | − 1.1 |
| | *oa* | 6486 | 249.5 | 13.1 | 248.2 | 14.3 |
| | *od* | 6486 | 242.8 | 15.0 | 243.6 | 15.9 |
| | *oe* | ..... | 248.8 | − 4.8 | ..... | ..... |
| | *of* | 6487*a* | 159.7 | 10.7 | 158.7 | 10.3 |
| | *og* | 6488 | 154.6 | 12.5 | 154.5 | 12.0 |
| 2862 July 27, '08 $9^h44^m2$ | *oh* | 6489*a* | 127.1 | −17.3 | 127.5 | −17.7 |
| 2876 July 28, '08 $9^h31^m5$ | *oh* | 6489*a* | 127.4 | −17.4 | 127.2 | −17.3 |
| 2884 July 29, '08 $11^h38^m8$ | *oh* | 6489*a* | 127.2 | −17.0 | 127.0 | −17.1 |
| 2889 July 31, '08 $10^h57^m1$ | *oh* | 6489*a* | 127.4 | −17.2 | 126.2 | −16.4 |
| | *oi* | 6490*a* | 29.6 | −13.2 | 28.9 | −13.4 |
| | *oj* | | 28.7 | −14.1 | | |
| 2894 Aug. 1, '08 $9^h20^m7$ | *oh* | 6489*a* | 127.8 | −16.9 | 126.1 | −16.6 |
| | *oi* | 6490*a* | 29.8 | −12.8 | 29.0 | −13.0 |
| | *ol* | | 28.9 | −13.8 | | |
| | *ok* | 6491*a* | 2.3 | 11.3 | 0.5 | 11.6 |
| | *om* | 6490 | 27.6 | −15.0 | 26.7 | −15.1 |
| | *on* | | 27.2 | −16.0 | | |
| 2903 Aug. 3, '08 $10^h01^m0$ | *oi* | 6490*a* | 29.7 | −12.7 | 29.3 | −12.8 |
| | *ol* | | 28.8 | −13.5 | | |
| | *ok* | 6491*a* | 0.9 | 11.1 | 0.5 | 11.4 |
| | *om* | 6490*b* | 28.2 | −16.0 | 27.2 | −15.4 |
| | *on* | | | | | |
| | *oo* | 6490*c* | 22.6 | −16.0 | 23.1 | −16.1 |
| | *op* | 6490*d* | 19.6 | −19.0 | 20.3 | −19.6 |
| | *oq* | | 21.3 | −20.0 | | |
| | *or* | 6492*a* | 26.4 | 7.5 | 25.2 | 8.0 |
| | *ou* | | 25.4 | 8.0 | | |
| | *os* | 6492*bc* | 22.2 | 8.8 | 22.0 | 8.6 |
| | *ot* | | 22.3 | 7.8 | | |
| 2912 Aug. 4, '08 $2^h37^m8$ | *ol* | 6490*a* | 29.9 | −13.0 | 28.9 | −12.8 |
| | *oi* | | | | | |
| | *ok* | 6491*a* | 2.9 | 11.8 | 0.5 | 12.2 |
| | | | 1.7 | 11.9 | | |
| | | | 359.7 | 13.2 | | |
| | | | 0.6 | 12.2 | | |
| | | | 1.0 | 10.9 | | |
| | | | 0.7 | 12.0 | | |
| | *om* | 6490*b* | 28.2 | −15.0 | 26.6 | −15.3 |
| | *on* | | 27.9 | −17.0 | | |
| | *oo* | 6490*c* | 21.9 | −16.0 | 21.7 | −15.7 |
| | *op* | 6490*d* | 19.7 | −19.5 | 20.1 | −18.7 |
| | *oq* | | 20.7 | −20.1 | | |
| | *or* | 6492*a* | 27.6 | 7.7 | 26.1 | 8.2 |
| | *os* | 6492*b* | 22.5 | 9.0 | 22.4 | 9.3 |
| | *ot* | 6492*c* | 22.1 | 7.7 | 22.0 | 7.8 |
| | *ou* | 6494 | 347.8 | − 7.7 | 345.7 | −7.2 |
| | *ov* | 6494 | 343.7 | − 7.9 | 342.8 | −7.3 |

TABLE XVIII—*Continued*

| Plate Number and Date | Letter | Greenwich Number | Spectroheliograph | | Greenwich | |
|---|---|---|---|---|---|---|
| | | | Longitude | Latitude | Longitude | Latitude |
| 2915 | *oi'* | 6493 | 37°6 | −10°0 | 36°1 | −10°0 |
| Aug. 5, '08 | *oi* | 6490*a* | 30.1 | −13.0 | 28.8 | −13.1 |
| 8h55m8 | *ol* | | 29.8 | −13.8 | | |
| | *om* | | 27.8 | −15.0 | | |
| | *on* | 6490*bc* | 28.5 | −17.0 | 24.0 | −16.1 |
| | *oo* | | 21.6 | −16.3 | | |
| | *op* | 6490*d* | 19.2 | −19.7 | 20.2 | −19.1 |
| | *or* | 6492*a* | 28.1 | 8.1 | 26.9 | 7.3 |
| | *os* | 6492*b* | 22.6 | 8.8 | 22.4 | 9.0 |
| | *ot* | 6492*c* | 21.8 | 7.2 | 21.5 | 7.3 |
| | *ou* | 6494 | 348.8 | − 8.0 | 347.6 | − 7.0 |
| | *ov* | 6494 | 341.9 | − 8.0 | 342.0 | − 7.3 |
| | | | 2.6 | 11.0 | | |
| | | | 1.5 | 11.8 | | |
| | *ok* | 6491*a* | 359.8 | 12.9 | 0.3 | 11.8 |
| | | | 0.3 | 12.1 | | |
| | | | 0.7 | 10.7 | | |
| | | | 0.5 | 11.6 | | |
| 2946 | *ow* | 6498 | 318.9 | −10.9 | 317.7 | −10.9 |
| Aug. 13, '08 | *ox* | 6499 | 272.6 | − 5.1 | 270.6 | − 5.2 |
| 9h32m8 | *oy* | 6499 | 268.5 | − 4.1 | 267.8 | − 4.7 |
| | *oz* | 6499 | 266.6 | − 5.0 | 266.1 | − 4.7 |
| 2955 | | | | | | |
| Aug. 14, '08 | *ox* | 6499*a* | 274.9 | − 5.0 | 273.1 | − 5.1 |
| 11h48m2 | | | 273.9 | − 5.2 | | |
| | | | 272.7 | − 6.1 | | |
| | *oy* | 6499 | 268.1 | − 4.5 | 268.0 | − 4.3 |
| | *oz* | 6499*b* | 266.8 | − 5.5 | 266.9 | − 5.6 |
| | *pa* | 6500 | 208.1 | −16.2 | 207.2 | −15.0 |
| | *pb* | 6500 | 205.2 | −14.1 | 204.8 | −14.1 |
| 2968 | *pa* | 6500*a* | 209.4 | −15.1 | 208.7 | −14.6 |
| Aug. 21, '08 | *pb'* | 6503 | 190.6 | −12.6 | 189.3 | −12.6 |
| 10h39m5 | *pd* | | 189.3 | −12.8 | | |
| | *pe* | 6503 | 187.7 | −14.5 | 186.7 | −14.6 |
| | | | 183.4 | −17.7 | | |
| | *pf* | 6503 | 182.0 | −17.2 | 183.3 | −16.7 |
| | | | 182.2 | −15.9 | | |
| | | | 183.3 | −18.5 | | |
| | *pg* | 6505 | 183.9 | 19.2 | 183.2 | 18.7 |
| 2971 | *pb'* | 6503 | 191.5 | −13.0 | 189.4 | −12.4 |
| Aug. 22, '08 | *pd* | | 189.7 | −12.7 | | |
| 9h17m0 | *pe* | 6503 | 188.9 | −14.2 | 187.2 | −14.0 |
| | *pf* | 6503 | 183.8 | −17.2 | 182.0 | −16.9 |
| | *pg* | 6505 | 184.1 | 19.0 | 183.5 | 19.2 |
| | *pb''* | 6506 | 200.4 | −22.5 | 197.8 | −22.5 |
| | *pe'* | 6506 | 194.7 | −21.7 | 193.3 | −21.1 |
| 2979 | *ph* | 6507*a* | 142.1 | −18.8 | 140.9 | −18.4 |
| Aug. 25, '08 | | | 141.2 | −18.9 | | |
| 10h43m3 | *pi* | 6507*b* | 135.6 | −18.5 | 135.2 | −18.1 |
| 2986 | *ph* | 6507*a* | 142.6 | −18.7 | 141.7 | −18.3 |
| Aug. 26, '08 | *pi* | 6507*b* | 135.6 | −18.0 | 135.5 | −18.0 |
| 3h14m5 | *pj* | 6510 | 39.0 | 5.8 | 38.5 | 5.0 |
| | *pk* | 6510 | 30.6 | 8.0 | 30.0 | 7.0 |
| | *pl* | 6511*a* | 31.4 | −12.6 | 30.0 | −14.0 |
| | *pm* | ..... | 74.1 | −12.4 | ..... | ..... |
| | *pn* | ..... | 70.9 | −13.0 | ..... | ..... |

TABLE XVIII—*Continued*

| Plate Number and Date | Letter | Greenwich Number | Spectrohelioograph | | Greenwich | |
|---|---|---|---|---|---|---|
| | | | Longitude | Latitude | Longitude | Latitude |
| 2987 | *pi* | 6507*b* | 137°2 | −18°8 | 134°9 | −18°1 |
| Aug. 27, '08 | *pj* | 6510 | 39.5 | 5.3 | 38.5 | 5.2 |
| $9^h33^m5$ | *pl* | 6511*a* | 31.7 | −13.2 | 30.8 | −13.6 |
| | *pk* | 6510 | 31.1 | 8.1 | 31.3 | 6.6 |
| | | | 29.7 | 7.5 | | |
| | | | 31.2 | 6.6 | | |
| | *pm* | 6512 | 74.5 | −13.3 | 73.7 | −12.7 |
| | *pn* | 6512 | 70.7 | −13.6 | 70.9 | −13.3 |
| | *po* | 6513 | 22.5 | 18.8 | 20.6 | 18.6 |
| | | | 20.3 | 19.0 | | |
| | *pp* | 6514 | 22.7 | 0.9 | 121.9 | 1.2 |
| | *pq* | 6515 | 117.3 | − 8.6 | 115.9 | − 8.2 |
| | *pr* | 6515 | 113.7 | − 9.1 | 113.2 | − 8.9 |
| 2999 | *pj* | 6510 | 40.0 | 5.0 | 39.3 | 4.7 |
| Aug. 28, '08 | *pk* | 6510 | 31.3 | 6.6 | 31.3 | 6.8 |
| $10^h10^m2$ | | | 30.0 | 7.4 | | |
| | | 6510 | 28.8 | 9.0 | 29.8 | 9.8 |
| | *pl* | 6511*a* | 32.1 | −13.2 | 30.8 | −13.6 |
| | | | 30.0 | −13.5 | | |
| | *pn* | 6512 | 70.2 | −12.9 | 70.7 | −13.0 |
| | *po* | 6513*a* | 22.5 | 18.2 | 21.8 | 18.3 |
| | *ps* | 6513*b* | 20.5 | 18.8 | 19.8 | 18.7 |
| | *pt* | 6516 | 16.0 | −15.9 | 14.9 | −16.0 |
| 3005 | *pj* | 6510 | 39.8 | 5.0 | 39.2 | 4.8 |
| Aug. 29, '08 | *pk* | 6510 | 31.2 | 6.2 | 30.3 | 7.4 |
| $9^h10^m0$ | | | 29.7 | 7.4 | | |
| | | | 30.8 | 8.1 | | |
| | | | 32.3 | 8.0 | | |
| | *pl* | 6511*a* | 31.7 | −13.4 | 31.2 | −13.3 |
| | | | 29.9 | −13.4 | | |
| | *po* | 6513*a* | 22.6 | 18.7 | 21.8 | 18.3 |
| | *pt* | 6516 | 15.2 | −15.8 | 14.7 | −15.7 |
| | *pu* | 6517*a* | 355.2 | − 6.3 | 354.7 | − 6.3 |
| 3013 | *pj* | 6510 | 39.6 | 5.5 | 40.4 | 4.7 |
| Aug. 31, '08 | *pk* | 6510 | 27.6 | 9.1 | 28.2 | 9.9 |
| $9^h28^m7$ | | 6510 | 29.5 | 7.2 | 29.6 | 8.0 |
| | | 6510 | 31.4 | 5.8 | 31.2 | 5.4 |
| | | 6510 | 31.2 | 7.9 | 32.5 | 8.4 |
| | *pl* | 6511*a* | 31.2 | −14.1 | 31.5 | −13.7 |
| | *po* | 6513*a* | 22.7 | 19.0 | 22.4 | 19.2 |
| | *pt* | 6516 | 14.7 | −16.1 | 14.8 | −15.9 |
| | *pu* | 6517*a* | 354.8 | − 7.6 | 354.7 | − 6.5 |
| | *pv* | 6518 | 2.5 | 12.8 | 1.6 | 12.8 |
| | *pw* | 6510 | 36.4 | 8.6 | 35.7 | 8.8 |
| | *px* | 6510 | 38.4 | 6.2 | 37.2 | 5.8 |
| | *py* | 6510 | 35.1 | 5.8 | 35.3 | 6.1 |
| | *pz* | 6518 | 0.5 | 13.9 | 359.8 | 13.8 |
| | *qa* | 6518 | 358.7 | 15.0 | 358.6 | 14.6 |
| | *qb* | 6518 | 356.7 | 13.2 | 357.1 | 13.2 |
| | *qc* | | 357.7 | 13.0 | | |
| | *qd* | 6510 | 41.7 | 3.6 | 43.1 | 3.3 |
| 3025 | *pj* | 6510 | 41.5 | 5.5 | 40.5 | 5.2 |
| Sept. 1, '08 | | 6510 | 40.4 | 5.0 | 39.2 | 3.2 |
| $9^h18^m4$ | *pk* | 6510 | 27.9 | 8.8 | 28.6 | 9.9 |
| | | 6510 | 30.1 | 7.7 | 29.7 | 7.8 |
| | | 6510 | 32.0 | 5.8 | 31.7 | 5.9 |
| | *pl* | 6511*a* | 31.6 | −14.0 | 31.2 | −13.7 |
| | *pu* | 6517*a* | 354.8 | − 6.1 | 355.0 | − 6.3 |
| | *pv* | 6518 | 2.3 | 13.5 | 1.7 | 13.1 |
| | *pw* | 6510 | 38.8 | 8.5 | 37.7 | 8.7 |
| | *px* | 6510 | 38.6 | 6.2 | 38.9 | 7.4 |
| | *qb* | 6518 | 357.4 | 14.2 | 357.6 | 14.3 |
| | *qd* | 6510 | 43.4 | 3.0 | 42.4 | 3.3 |

TABLE XVIII—*Continued*

| Plate Number and Date | Letter | Greenwich Number | Spectroheliograph | | Greenwich | |
|---|---|---|---|---|---|---|
| | | | Longitude | Latitude | Longitude | Latitude |
| 3033 | | | | | | |
| Sept. 2, '08 | *pj* | 6510 | 40°6 | 5°0 | 41°7 | 5°1 |
| $10^h02^m8$ | | | 41.4 | 6.9 | 40.3 | 7.3 |
| | | 6510 | 31.3 | 6.0 | 31.4 | 5.1 |
| | *pk* | 6510 | 30.5 | 8.1 | 29.7 | 8.0 |
| | | 6510 | 29.1 | 10.1 | 28.7 | 10.0 |
| | | ..... | 28.3 | 8.7 | ..... | ..... |
| | *pl* | 6511*a* | 31.9 | −13.5 | 30.8 | −13.6 |
| | *pu* | 6517*a* | 355.2 | − 6.1 | 354.9 | − 6.2 |
| | *pv* | 6518 | 1.2 | 13.0 | 1.7 | 13.1 |
| | *pw* | 6510 | 39.4 | 8.4 | 38.0 | 9.0 |
| | *px* | 6510 | 38.9 | 6.0 | 38.2 | 5.4 |
| | *qb* | 6518 | 357.0 | 14.2 | 357.5 | 14.5 |
| | *qd* | 6510 | 44.2 | 3.3 | 43.2 | 3.5 |
| | *qe* | 6511*b* | 28.0 | −14.7 | 27.6 | −15.8 |
| | *qf* | 6511*b* | 28.3 | −17.0 | 30.3 | −16.6 |
| 3039 | | | | | | |
| Sept. 3, '08 | | | 41.1 | 4.5 | ..... | ..... |
| $9^h32^m2$ | *pj* | ..... | 42.1 | 7.0 | ..... | ..... |
| | | | 43.7 | 4.8 | ..... | ..... |
| | | | 43.1 | 3.1 | ..... | ..... |
| | | 6510 | 32.4 | 6.0 | 31.6 | 6.3 |
| | | 6510 | 31.0 | 7.7 | 29.8 | 8.2 |
| | *pk* | 6510 | 29.2 | 10.3 | 29.7 | 10.4 |
| | | 6510 | 28.4 | 8.6 | 28.1 | 9.1 |
| | *pl* | 6511*a* | 31.7 | −14.0 | 31.0 | −13.6 |
| | *pu* | 6517*a* | 355.5 | − 6.2 | 354.9 | − 6.5 |
| | *pv* | 6518 | 2.8 | 13.0 | 1.7 | 12.8 |
| | *pw* | ..... | 40.0 | 8.5 | ..... | ..... |
| | *px* | ..... | 39.5 | 5.7 | ..... | ..... |
| | *qd* | 6510 | 45.0 | 3.2 | 43.7 | 3.8 |
| 3044 | | | | | | |
| Sept. 4, '08 | | | 28.8 | 9.9 | 28.9 | 10.8 |
| $11^h03^m9$ | *pk* | 6510 | 28.5 | 7.9 | 28.5 | 9.0 |
| | | | 31.0 | 7.0 | 31.1 | 8.6 |
| | *pl* | 6511*a* | 31.8 | −14.3 | 30.9 | −13.4 |
| | *pl'* | 6511 | 35.0 | −16.0 | 32.8 | −15.0 |
| | *pu* | 6517*a* | 355.8 | − 6.9 | 355.0 | − 6.4 |
| | *pv* | 6518 | 2.2 | 12.3 | 2.0 | 12.9 |
| | *pw* | 6510 | 39.7 | 8.1 | 38.8 | 9.2 |
| | *qg* | 6519*a* | 289.8 | − 5.4 | 279.8 | − 5.9 |
| | *qi* | 6518 | 259.4 | 13.7 | 359.7 | 13.4 |
| 3048 | *pu* | 6517*a* | 355.5 | − 7.0 | 355.1 | − 6.6 |
| Sept. 5, '08 | | | 2.3 | 13.1 | | |
| $10^h22^m4$ | *pv* | 6518 | 1.8 | 12.7 | 1.2 | 12.7 |
| | *qg* | 6519*a* | 280.0 | − 6.1 | 279.7 | − 5.8 |
| | *qh* | 6520*a* | 264.8 | 14.6 | 263.8 | 14.3 |
| 3058 | *qg* | 6519*a* | 280.4 | − 5.9 | 279.7 | − 5.7 |
| Sept. 8,'08 | | | 267.8 | 12.9 | | |
| $10^h48^m2$ | *qh* | 6520*a* | 266.3 | 9.0 | 266.5 | 13.4 |
| | *qj* | 6523*a* | 286.4 | 9.1 | 285.9 | 9.5 |
| | *qk* | 6523*b* | 281.3 | 7.5 | 280.6 | 7.8 |
| | *ql* | 6522 | 259.0 | 14.1 | 257.9 | 14.3 |
| | *qm* | 6524*a* | 236.2 | −14.0 | 235.7 | −13.8 |
| | *qn* | 6524*b* | 233.0 | −14.2 | 233.0 | −13.0 |
| 3062 | *qg* | 6519*a* | 280.3 | − 5.9 | 279.7 | − 5.6 |
| Sept. 9, '08 | *qh* | 6520*a* | 269.0 | 11.9 | 267.9 | 11.7 |
| $10^h30^m4$ | | | 281.8 | 7.2 | | |
| | *qk* | 6523*b* | 281.2 | 8.0 | 280.9 | 7.8 |
| | | 6522 | 258.1 | 14.3 | 257.4 | 14.6 |
| | *ql* | 6522 | 257.4 | 16.2 | 257.3 | 16.5 |
| | *qm* | 6524*a* | 236.7 | −13.6 | 236.1 | −13.6 |
| | *qn* | 6524*b* | 232.1 | −13.7 | 232.2 | −13.8 |

TABLE XVIII—*Continued*

| Plate Number and Date | Letter | Greenwich Number | Spectroreliograph | | Greenwich | |
|---|---|---|---|---|---|---|
| | | | Longitude | Latitude | Longitude | Latitude |
| 3070 | *qg* | 6519*a* | 280°.5 | − 5°.9 | 279°.8 | − 5°.6 |
| Sept. 10, '08 | *qh* | 6520*a* | 270.9 | 11.2 | 269.4 | 11.3 |
| $9^h44^m.8$ | | 6522 | 267.5 | 12.3 | 267.0 | 12.6 |
| | *ql* | 6522 | 258.2 | 16.9 | 257.4 | 16.9 |
| | *qm* | 6524*a* | 236.6 | −13.4 | 236.6 | −13.1 |
| | *qn* | 6524*b* | 232.1 | −13.2 | 232.2 | −13.6 |
| | | | 232.5 | −14.2 | | |
| | *qo* | 6522 | 262.5 | 14.0 | 263.7 | 13.7 |
| | | | 263.3 | 12.9 | | |
| | | | 262.1 | 12.7 | | |
| 3083 | *qg* | 6519*a* | 280.3 | − 5.8 | 279.7 | − 5.5 |
| Sept. 11, '08 | *qh* | 6520*a* | 271.0 | 11.2 | 270.6 | 11.5 |
| $8^h31^m.1$ | *qm* | 6524*a* | 236.7 | −13.3 | 236.4 | −13.3 |
| | *qn* | 6424*b* | 232.7 | −13.2 | 231.9 | −13.7 |
| | | | 232.6 | −14.2 | | |
| | *qo* | 6522 | 262.0 | 14.1 | 263.3 | 13.6 |
| | | | 262.9 | 14.1 | | |
| | | | 261.2 | 14.2 | | |
| | *qp* | 6525*a* | 182.9 | − 3.4 | 181.7 | − 3.1 |
| | *qq* | 6522 | 265.4 | 11.7 | 266.6 | 10.9 |
| 3090 | *qg* | 6519*a* | 280.9 | − 6.3 | 279.3 | − 5.4 |
| Sept. 12, '08 | *qh* | 6520*a* | 271.1 | 11.0 | 270.5 | 11.1 |
| $10^h29^m.4$ | *qn* | 6524*b* | 232.9 | −13.6 | 232.3 | −13.3 |
| | *qo* | 6522 | 262.1 | 13.7 | 262.2 | 13.6 |
| | *qp* | 6525*a* | 183.0 | − 2.7 | 182.3 | − 2.9 |
| | *qq* | 6522 | 266.5 | 11.2 | 266.2 | 11.7 |
| 3094 | *qp* | 6525*a* | 183.5 | − 2.9 | 182.9 | − 2.7 |
| Sept. 15, '08 | *qr* | ..... | 233.3 | −13.3 | ..... | ..... |
| $9^h41^m.2$ | *qt* | 6524 | 227.5 | −13.8 | 227.1 | −12.3 |
| | *qs* | 6526*a* | 131.0 | 8.8 | 130.5 | 7.8 |
| 3100 | *qp* | 6525*a* | 183.4 | − 2.8 | 183.1 | − 2.7 |
| Sept. 16, '08 | *qr* | 6524*c* | 233.8 | −12.1 | 232.7 | −11.6 |
| $11^h04^m$ | *qt* | 6524 | 227.1 | −12.0 | 227.0 | −11.6 |
| | *qs* | 6526*a* | 131.7 | 8.0 | 130.7 | 7.9 |
| | *qu* | 6526*b* | 125.9 | 8.8 | 125.9 | 7.8 |
| | | | 126.3 | 9.5 | | |
| | | | 127.2 | 7.7 | | |
| 3104 | *qp* | 6525*a* | 183.9 | − 2.8 | 183.3 | − 2.6 |
| Sept. 17, '08 | *qs* | 6526*a* | 131.7 | 8.1 | 130.6 | 8.3 |
| $10^h28^m.6$ | *qu* | 6526*b* | 125.8 | 9.0 | 125.9 | 8.8 |
| | *qv* | 6527*a* | 211.5 | −16.3 | 210.5 | −16.2 |
| | *qw* | 6527 | 207.9 | −17.6 | 207.0 | −17.2 |
| 3109 | *qp* | 6525*a* | 184.1 | − 2.4 | 183.3 | − 2.4 |
| Sept. 18, '08 | *qs* | 6526*a* | 131.9 | 8.8 | 130.7 | 8.5 |
| $9^h40^m.6$ | *qu* | 6526*b* | 127.2 | 9.1 | 126.1 | 9.0 |
| | *qx* | 6529*a* | 96.7 | −12.3 | 94.9 | −11.9 |
| | *qy* | 6529 | 93.1 | −14.9 | 92.8 | −13.8 |
| 3113 | *qp* | 6525*a* | 184.3 | − 2.4 | 183.7 | − 2.4 |
| Sept. 19, '08 | *qs* | 6526*a* | 131.6 | 8.8 | 131.2 | 8.7 |
| $10^h31^m.5$ | *qu* | 6526 | 127.1 | 8.8 | 127.2 | 8.6 |
| | | 6526 | 125.9 | 10.1 | 125.7 | 9.9 |
| | *qx* | 6529*a* | 97.2 | −12.4 | 96.9 | −12.3 |
| | *qy* | 6529 | 92.3 | −14.6 | 92.9 | −14.3 |
| | *qz′* | 6532*a* | 93.8 | 5.5 | 94.0 | 5.9 |
| | *ra* | 6532*b* | 91.8 | 6.8 | 91.7 | 7.0 |
| | *qz* | 6530*a* | 76.1 | 16.1 | 75.9 | 16.2 |
| 3117 | *qs* | 6526*a* | 131.3 | 9.1 | 131.0 | 9.1 |
| Sept. 21, '08 | *qu* | 6526 | 125.6 | 10.9 | 125.3 | 10.6 |
| $10^h04^m.6$ | *qx* | 6529*a* | 97.8 | −12.2 | 98.0 | −12.3 |
| | *qz* | 6530*a* | 75.9 | 16.3 | 75.1 | 16.0 |
| | *rb* | 6526 | 127.8 | 9.0 | 127.6 | 9.1 |

TABLE XVIII—*Continued*

| Plate Number and Date | Letter | Greenwich Number | Spectroheliograph | | Greenwich | |
|---|---|---|---|---|---|---|
| | | | Longitude | Latitude | Longitude | Latitude |
| 3121 | *qx* | 6529*a* | 99°.9 | −13°.1 | 99°.0 | 12°.5 |
| Sept. 25, '08 | *qz* | 6530*a* | 75.1 | 16.1 | 73.9 | 16.1 |
| $10^h28^m.4$ | *rc* | 6534*a* | 55.8 | 8.4 | 55.3 | 8.3 |
| | *rd* | 6533 | 47.3 | 7.9 | 44.7 | 8.6 |
| | *re* | | 45.1 | 10.1 | | |
| | *rf* | 6533 | 45.1 | 11.6 | 42.7 | 11.6 |
| | *rg* | | 42.9 | 9.0 | | |
| | *rh* | 6535*a* | 357.3 | − 6.4 | 356.5 | − 6.8 |
| 3124 | *qx* | 6529*a* | 100.5 | −13.4 | 99.4 | −13.4 |
| Sept. 26, '08 | | 6529 | 97.6 | −11.5 | 96.8 | −11.7 |
| $10^h18^m.5$ | *rc* | 6534*a* | 56.3 | 8.1 | 55.9 | 8.0 |
| | *rd* | 6533 | 47.5 | 7.0 | 47.3 | 7.5 |
| | *re* | 6533 | 46.0 | 10.0 | 45.3 | 10.1 |
| | | | 45.0 | 9.2 | | |
| | *rf* | 6533 | 45.1 | 11.5 | 44.6 | 11.6 |
| | *rg* | 6533 | 43.0 | 9.0 | 44.5 | 8.2 |
| | | 6533 | 43.5 | 10.5 | 42.9 | 11.2 |
| | | 6533 | | | 42.6 | 9.0 |
| | *rh* | 6535*a* | 357.0 | − 6.4 | 357.0 | − 6.2 |
| 3128 | *rc* | 6534*a* | 58.0 | 7.0 | 56.9 | 7.3 |
| Sept. 29, '08 | *re* | 6533 | 48.9 | 9.3 | 48.1 | 9.6 |
| $9^h11^m.4$ | *rg* | 6533 | 45.8 | 9.0 | 46.1 | 9.2 |
| | *rh* | 6535*a* | 358.0 | − 7.0 | 357.4 | − 6.7 |
| | *ri* | 6537*a* | 314.0 | −12.6 | 313.5 | −12.3 |
| 3132 | *rc* | 6534*a* | 58.1 | 7.2 | 56.7 | 7.3 |
| Sept. 30, '08 | *re* | 6533 | 49.8 | 9.7 | 49.3 | − 9.5 |
| $9^h37^m$ | *rg* | 6533 | 46.4 | 9.2 | 46.0 | 9.1 |
| | *rh* | 6535*a* | 357.8 | − 6.7 | 357.3 | − 6.5 |
| | *ri* | 6537*a* | 313.8 | −12.0 | 313.3 | −12.1 |
| | | | 312.4 | −12.0 | | |
| | *rj* | 6538*a* | 326.3 | −15.6 | 325.7 | −15.8 |
| | *rk* | 6538*b* | 322.5 | −15.0 | 323.0 | −15.1 |
| 3139 | *rj* | 6538*a* | 328.6 | −15.4 | 328.0 | −15.3 |
| Oct. 2, '08 | *ri* | 6537*a* | 314.3 | −12.0 | 313.7 | −11.8 |
| $9^h19^m.4$ | *rm* | 6539 | 281.7 | − 6.9 | 281.2 | − 6.9 |
| | *rn* | 6539*a* | 278.8 | − 5.8 | 277.9 | − 5.6 |
| | *ro* | 6540 | 271.9 | 11.6 | 271.8 | 11.5 |
| 3147 | *rj* | 6538*a* | 328.9 | −15.6 | 328.3 | −15.3 |
| Oct. 3, '08 | *ri* | 6537*a* | 313.0 | −12.3 | 313.6 | −11.9 |
| $9^h43^m.6$ | *rm* | 6539 | 281.2 | − 6.8 | 280.9 | − 6.6 |
| | *rn* | 6539*a* | 278.7 | − 5.8 | 278.3 | − 5.6 |
| | *ro* | 6540 | 272.2 | 11.8 | 271.7 | 11.6 |
| 3151 | *ri* | 6537*a* | 314.2 | −12.5 | 313.8 | −12.3 |
| Oct. 5, '08 | *rm* | 6539 | 280.8 | − 7.0 | 280.8 | − 6.7 |
| $9^h31^m.6$ | *rn* | 6539*a* | 278.7 | − 6.5 | 278.3 | − 5.6 |
| | *ro* | 6540 | 272.0 | 11.7 | 271.4 | 12.0 |
| 3158 | *ri* | 6537*a* | 314.3 | −12.1 | 313.0 | −12.3 |
| Oct. 7, '08 | *rn* | 6539*a* | 279.6 | − 5.2 | 278.6 | − 5.2 |
| $11^h40^m$ | *ro* | 6540 | 272.3 | 12.2 | 271.4 | 12.1 |
| 3163 | *rn* | 6539*a* | 280.3 | − 5.3 | 279.3 | − 5.2 |
| Oct. 8, '08 | *ro* | 6540 | 272.3 | 12.1 | 271.7 | 12.3 |
| $9^h56^m.5$ | | | | | | |
| 3166 | *rn* | 6539*a* | 280.6 | − 4.8 | 279.7 | − 4.7 |
| Oct. 9, '08 | *ro* | 6540 | 272.6 | 12.4 | 271.7 | 12.7 |
| $9^h52^m.7$ | *rs* | 6547*a* | 185.5 | 6.3 | 184.8 | 6.0 |
| 3170 | *ro* | 6540 | 272.7 | 12.1 | 271.4 | 12.4 |
| Oct. 10, '08 | *rn* | 6539*a* | 282.0 | − 5.0 | 279.9 | − 4.8 |
| $9^h32^m.4$ | *rs* | 6547*a* | 185.2 | 6.2 | 184.8 | 6.2 |
| | *rt* | 6549 | 264.8 | −19.0 | 263.3 | −18.9 |
| | *ru* | 6549*a* | 260.6 | −19.0 | 260.1 | −18.9 |

TABLE XVIII—*Continued*

| Plate Number and Date | Letter | Greenwich Number | Spectroheliograph | | Greenwich | |
|---|---|---|---|---|---|---|
| | | | Longitude | Latitude | Longitude | Latitude |
| 3173 Oct. 12, '08 $9^h18^m3$ | *rs* | 6547*a* | 185°3 | 6°0 | 184°8 | 6°2 |
| 3177 Oct. 13, '08 $9^h38^m0$ | *rs* | 6547*a* | 185.6 | 6.6 | 185.3 | 6.4 |
| 3195 Nov. 2, '08 $11^h55^m6$ | *rv* | 6558*a* | 272.0 | 12.9 | 271.6 | 12.8 |
| 3197 Nov. 4, '08 $11^h05^m9$ | *rv* | 6538*a* | 272.0 | 12.5 | 271.5 | 12.6 |
| | *rw* | 6559*a* | 208.1 | −14.0 | 208.4 | −13.3 |
| 3198 Nov. 6, '08 $9^h48^m4$ | *rv* | 6558*a* | 271.6 | 13.0 | 271.6 | 12.7 |
| | *rw* | 6559*a* | 209.0 | −14.0 | 208.8 | −13.7 |
| | *rx* | 6561 | 194.7 | 13.9 | 194.3 | 13.7 |
| | *ry* | 6562*a* | 178.0 | 9.3 | 177.5 | 9.6 |
| 3213 Nov. 19, '08 $11^h50^m0$ | *rz* | 6567*b* | 77.1 | 3.7 | 76.3 | 3.7 |
| | *sa* | 6567 | 75.8 | 5.0 | 75.9 | 4.4 |
| | *sb* | ..... | 73.5 | 4.4 | ..... | ..... |
| | *sc* | 6569*a* | 65.5 | 10.2 | 65.5 | 9.9 |
| | *sd* | 6569*b* | 60.1 | 12.0 | 59.5 | 11.9 |
| | *se* | 6569 | 61.7 | 10.8 | 61.7 | 10.3 |
| 3215 Nov. 20, '08 $11^h45^m3$ | *rz* | 6567*b* | 77.7 | 3.4 | 77.0 | 3.4 |
| | *sa* | 6567 | 76.9 | 4.7 | 75.8 | 4.9 |
| | *sc* | 6569*a* | 66.4 | 9.8 | 65.2 | 10.1 |
| | *sd* | 6569*b* | 60.3 | 12.0 | 59.5 | 11.9 |
| | *se* | 6569 | 62.0 | 10.8 | 61.0 | 10.7 |
| 3220 Nov. 27, '08 $11^h36^m5$ | *sf* | 6574*a* | 294.2 | −17.8 | 294.9 | −17.5 |
| 3223 Nov. 28, '08 $11^h50^m9$ | *sf* | 6574*a* | 294.0 | −17.3 | 294.6 | −17.7 |

## SUMMARY

1. Measures of 3777 points on the calcium flocculi give the following results for the diu rnal motions ($\xi$) and periods (P) in mean solar days at various heliographic latitudes ($\phi$).

| Number | $\phi$ | $\xi$ | P | Number | $\phi$ | $\xi$ | P |
|---|---|---|---|---|---|---|---|
| 267..... | 2°.78 | 14°.56 | 24d.72 | 664..... | 22°.20 | 14°.12 | 25d.50 |
| 540..... | 7.80 | 14.51 | 24.81 | 274..... | 27.17 | 13.98 | 25.75 |
| 842..... | 12.56 | 14.38 | 25.03 | 107..... | 32.03 | 13.75 | 26.18 |
| 1044..... | 17.49 | 14.30 | 25.17 | 39..... | 37.32 | 13.43 | 26.81 |

2. The results may be best represented by the formula

$$\xi = 11°.584 + 2°.976 \cos^2 \phi.$$

3. Consideration of the hemispheres separately shows higher velocities in the southern hemisphere.

4. Though the results for the later years of the series of plates indicate somewhat slower velocities than for the earlier dates, it is questionable if a variation in the rate of rotation can be considered as established.

5. The observations indicate differential motion of the flocculi about the spots, anti-cyclonic about single spots, cyclonic about the preceding member of bi-polar spots and anti-cyclonic about the following member.

6. Comparison of these observations with others by the same method shows close agreement. Comparison of the means of results by various methods shows that there is progressive increase of velocity with ascent in the solar atmosphere.

7. Figures are given for the areas covered by the flocculi. In general the zone of maximum floccula-tion coincides with the zones of maximum spottedness, and moves progressively toward the equator with the spots.

8. The positions of sun-spots are in fair agreement with the Greenwich photoheliographic results, which indicates that the method of measurement is quite as reliable as the older method of measurement.

I wish to express my obligation to Professor Edwin B. Frost, who after my change of station extended to me the use of the facilities of the Yerkes Observatory that I might continue the measurement of the plates. Also I wish to express my indebtedness to Miss Laura E. Christman and to Miss Ruth D. Bannister, who assisted in many of the computations involved in the reduction of the measures to diurnal motions; and to Miss Maude Bennot for skilful assistance in the varied computations of the latter parts of this work and in its preparation in form for publication.

DEARBORN OBSERVATORY
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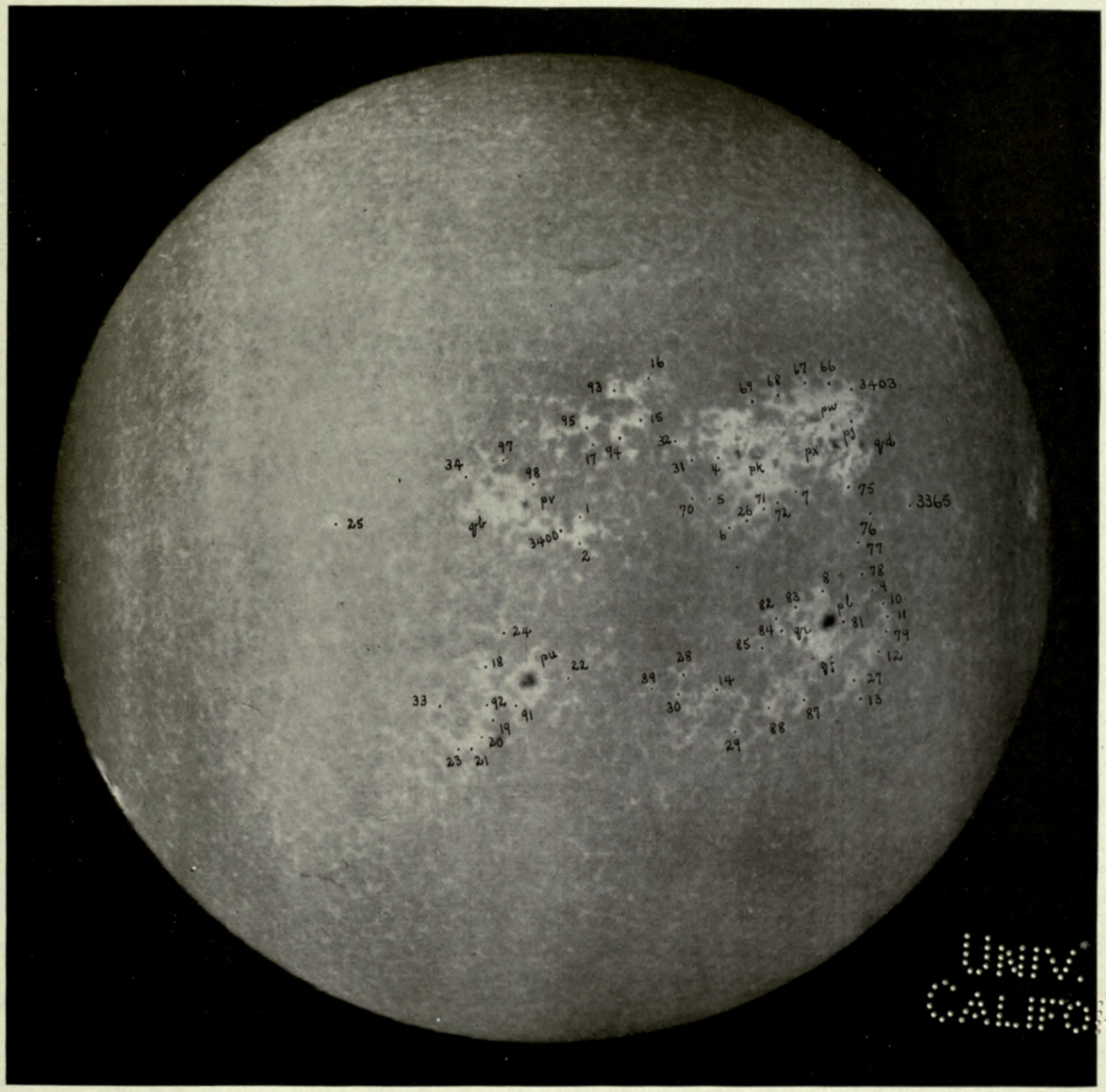
May 1, 1920

# PLATE XXIV

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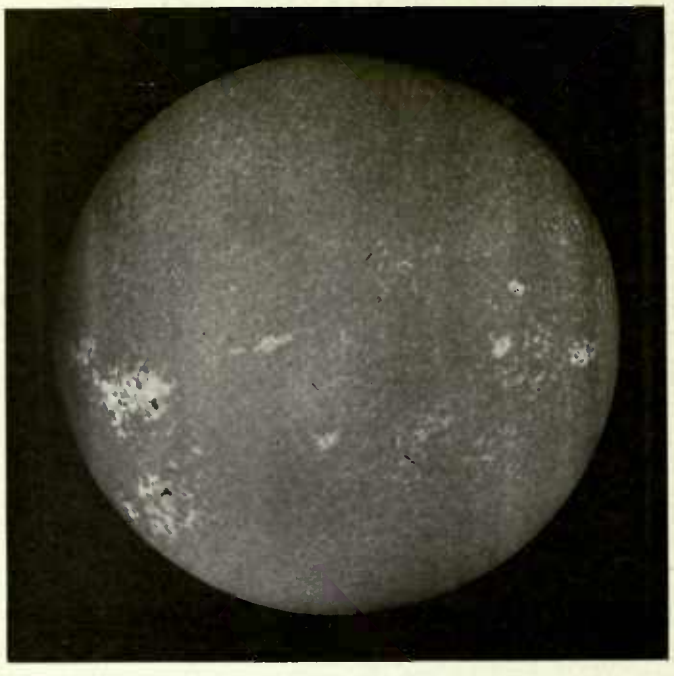
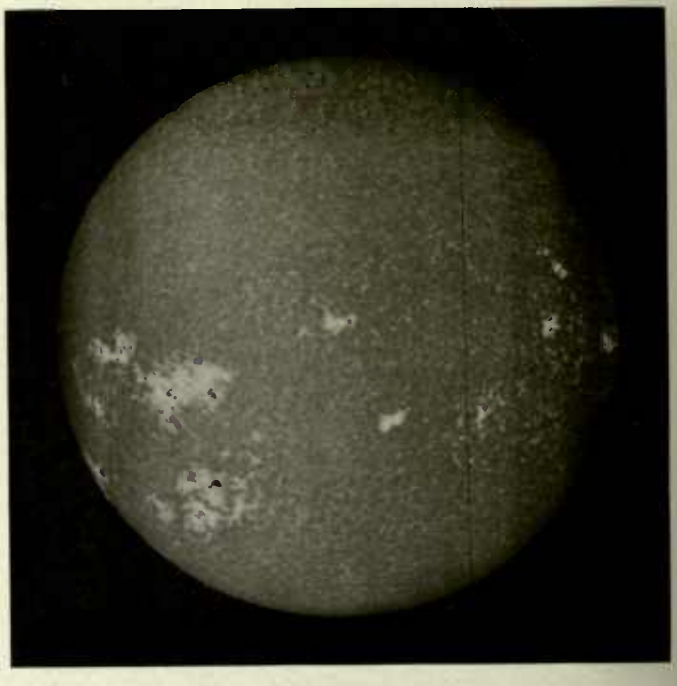
SPECTROHELIOGRAM WITH FLOCCULI MARKED FOR MEASUREMENT

No. 3033, September 2, 1908, Fox and Abetti

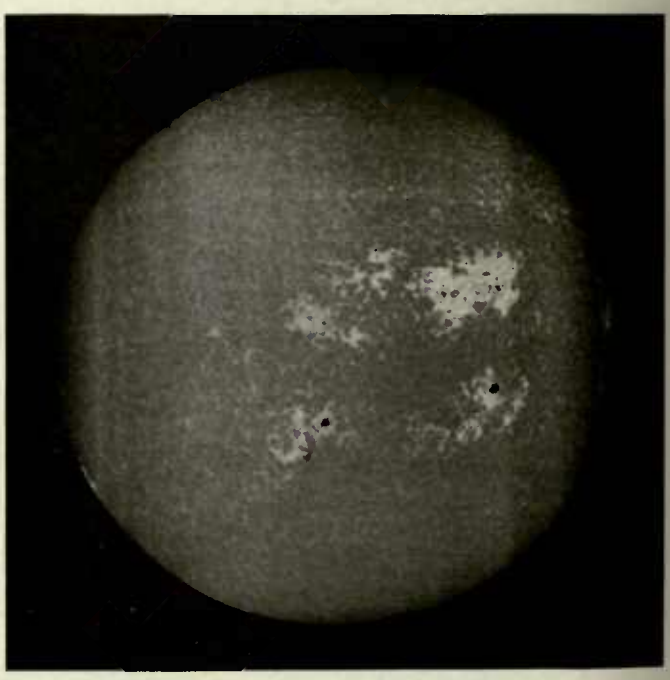


No. 2988. Aug. 27, 1908. Fox–Abetti



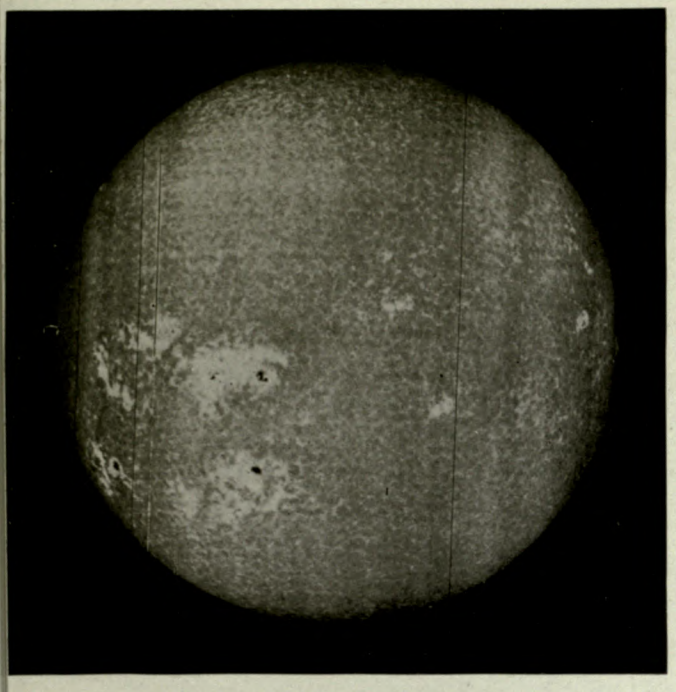
No. 2999. Aug. 28, 1908. Fox

No. 3025. Sept. 1, 1908. Fox–Abetti

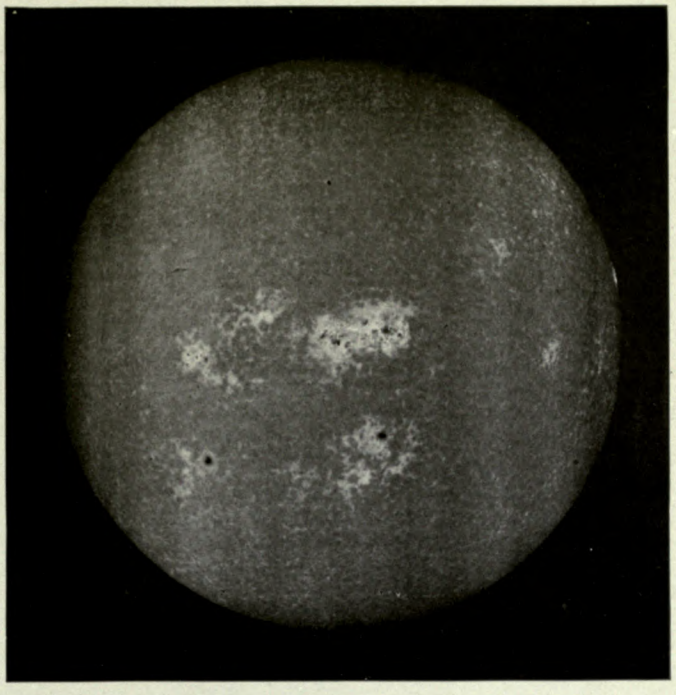


No. 3033. Sept. 2, 1908. Fox–Abetti

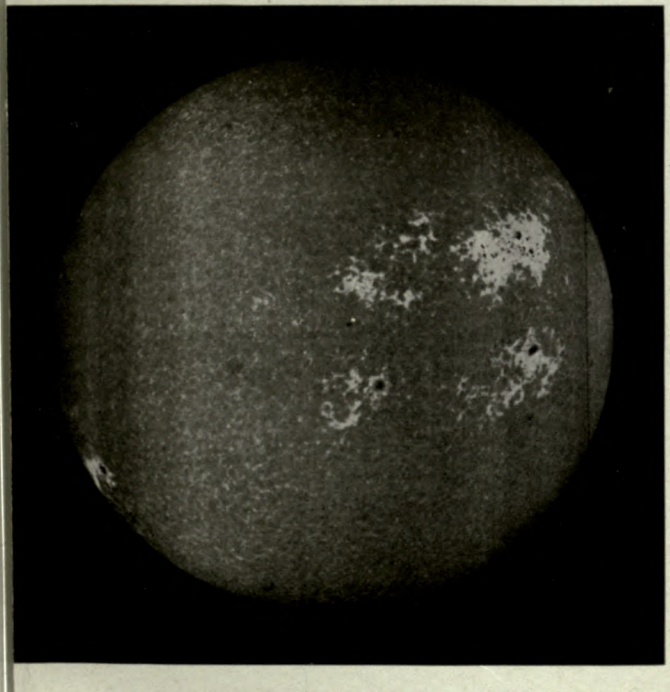
A SERIES OF SPECTROHELIOGRAMS SHOWING THE SYNODIC ROTATION OF THE SUN.



No. 3005. Aug. 29, 1908. Fox–Abetti



No. 3012. Aug. 31, 1908. Fox–Abetti



No. 3039. Sept. 3, 1908. Fox–Abetti

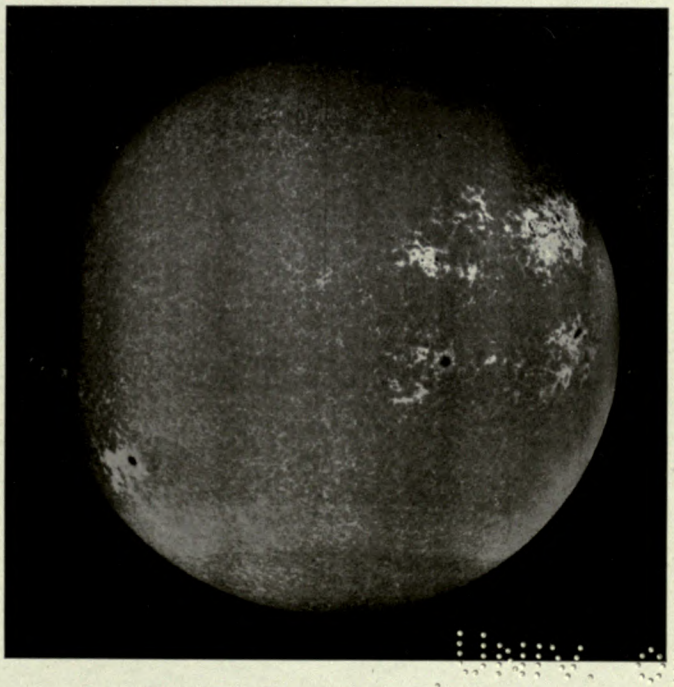


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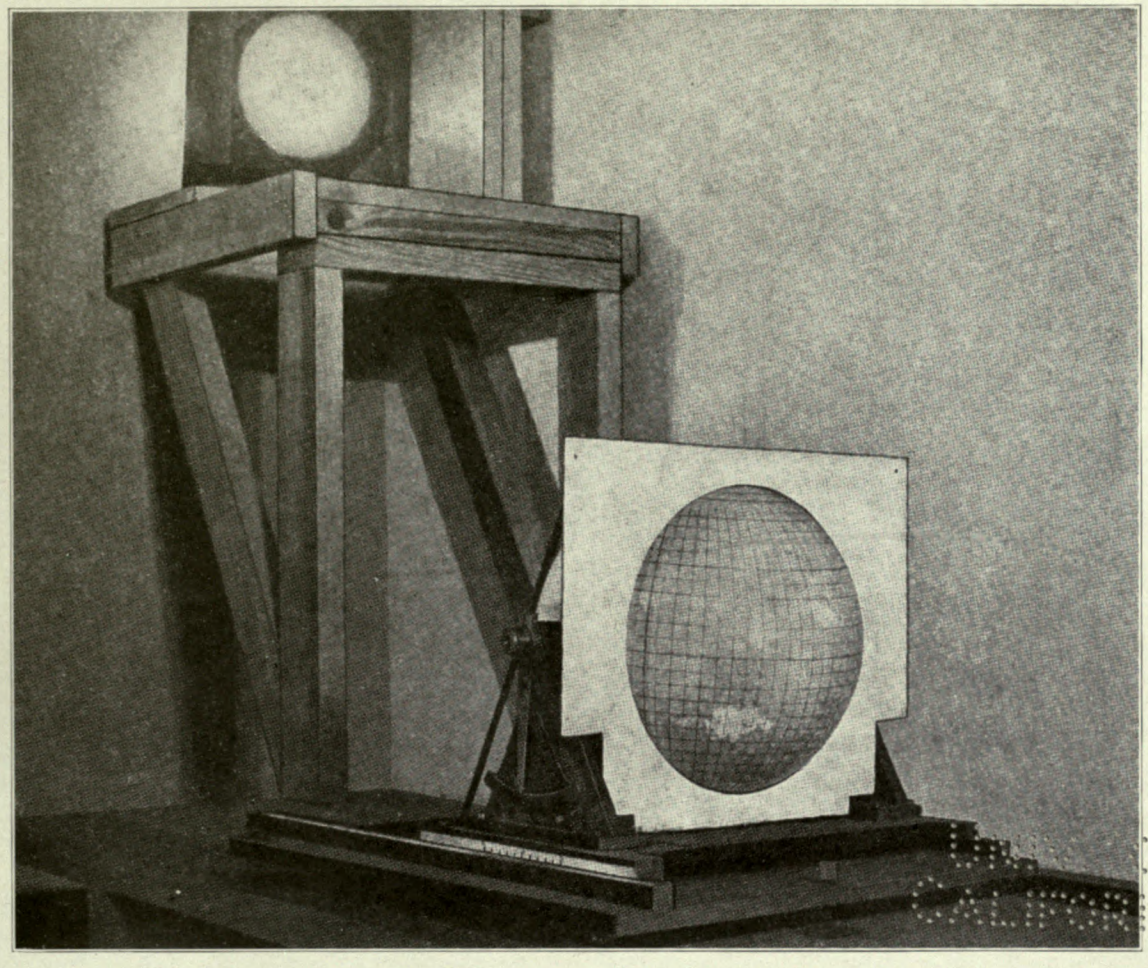
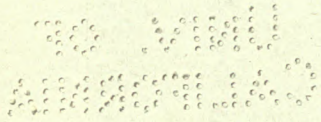
PLATE XXVI



THE RULED GLOBE WITH SPECTROHELIOGRAM PROJECTED UPON IT



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